

ANTIQUITY

EXPLAINED,

And REPRESENTED in

SCULPTURES,

BY THE

Learned Father *MONTFAUCON*.

Translated into *English* by

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B O O K I.

Concerning the levying Soldiers, the Military Habit and Arms of the Infantry of all Nations.

C H A P. I.

- I. The manner of levying Soldiers among the Greeks; and first, among the Lacedemonians. II. Why the Lacedemonian Soldiers were cloathed in red. III. Their military Order. IV. Other Manners of Levying Soldiers among the Greeks. V. When the Athenians first gave Pay to their Soldiers.*

I.  E are now come to one of the principal Parts of the whole Work, and perhaps that which is of greatest Service towards the understanding of History. We shall in this often have occasion to observe what has been already taken notice of in the preceding Volumes, namely, that the Monuments transmitted to us do not always agree with what Historians relate; the Reason of

which Disagreement is not however difficult to guess: For an Author relates, for Example, an Usage or Custom that prevail'd in his Time, which Usage afterwards changes, and is represented by a Graver according to the Change it has undergone. Another Author perhaps speaks of some particular present Custom, without taking notice of many others that prevail at the same time, which is another Reason why we often find in Painting and Statuary very different Images from those related by Historians.

That we may deduce the thing from its Origin, we will first shew how the *Greeks, Romans* and other Nations levied their Forces; which Levy the *Greeks* call'd *σερατολογία* or *καταγεραφῆ*, and the *Latins, Delectus* or *Dilectus*. The *Lacedemonians* indeed cannot properly be said to have made any (*Dilectus, Choice*, or) Levies of Troops, by reason that they were all train'd up to War, and all oblig'd to repair thither at the Command of the *Ephori*, both Cavalry and Infantry, together with all sorts of Artificers to serve the Necessities of the Army.

The Cavalry was thus rais'd: The *Ephori* selected three Men of Valour, whom they call'd *Hippagretes*, that is the Leviers of the Horse; for every one of these rais'd a hundred Men, and gave a Reason for preferring that hundred to any other.

II. The *Lacedemonian* Soldiers were cloath'd in red, and arm'd with brazen Shields; and it was reckon'd a capital Crime among them to return from the Wars without their Shield. *Suidas* says they wore red Cloaths, that the Blood of the Wounded might the less appear therein. But besides the *Spartan* and neighbouring

bouring Soldiers they had also Strangers in their Troops, which they call'd *τετοριμοι*, in *Latin*, *Alumni*, because the State was oblig'd to subsist them.

III. It was the Fashion with them to wear long Hair, believing that it gave them a kind of Majestick Air, and struck the Enemy with Terror. The Army was originally divided into six Cohorts, every Cohort containing five hundred Men, both the Foot and the Horse. Each Cohort had a Chief, which they call'd *Polemarchus*, four *Centenarii*, eight *Quinquagenarii*, and sixteen *Præfecti* or Lieutenants of five and twenty Men. These Cohorts were again divided into small Plottons of three or six Men, when the Case requir'd it and the General commanded it. The King for the most part commanded in Person, and before he took the Field, sacrific'd to *Jupiter Agetor* or *Ductor*, and to his Fellow-Deities. A Minister took the Fire of the Altar and carried it to the Frontiers of the Country, not far from the City, where the King sacrific'd again to *Jupiter* and *Minerva*. The number of Troops above-mention'd were afterwards augmented.

IV. In the early Ages the *Greeks* levied their Troops by Lot, as may be seen in the last Book of *Homer's Iliad*; but in After-times, when the Country was divided into several small Republicks, which were always at War with one another, all that were of Age to serve were promiscuously enroll'd. The *Athenians* were appointed to guard the City and Forts at the Age of Eighteen, and were sent upon military Expeditions at twenty.

The Soldiers, *Ælian* says, were all branded in the Hand with a sort of Marks they call'd *σηματα*, which were sometimes the Names of their Chiefs, and sometimes of any other thing. *Vegetius* also says almost the same thing; and *Stewechius*, in his Notes upon that Chapter, gives many Examples of it. The celebrated and most learned *Dr. Potter* likewise confirms it in his *Archæologia Græca*.

V. The *Athenians*, who at first made War only upon their Neighbours, allow'd their Soldiers no Pay, but every one subsisted himself, the Name of *Mercenary* among them being look'd upon as opprobrious and disgraceful; but that Custom was afterwards laid aside. Their Territories were not very extensive, so that military Expeditions were of consequence not very long when they were confin'd to their Neighbours only.

Before they went upon any Expedition they brought their Men to the *Lycæum* to be review'd, where they pick'd out such of them as they thought fittest for Service. *Pericles* was the first at *Athens* that took Soldiers into his Service for Pay, saying it was unreasonable that the Poor and the Artificers, who were scarce able to provide for their Families, should be oblig'd to spend the little they had in the publick Service. From that time the *Athenians* allow'd all their Soldiers Subsistence, and oblig'd all the Cities they had subjected to furnish them with a certain number of Men and Ships; Examples of which are very frequent in *Thucydides*.



C H A P. II.

I. The Manner of levying Soldiers at Rome, and whose Business that was. II. Every one was obliged to be present at the Levy. III. The Age and Stature of them who were listed Soldiers. IV. The Necessity of taking an Oath before they went to any Battle. V. The Form of the Oath. VI. The Reasons for which some of them were dispensed with from going to War.

I. **W**HEN there was Occasion for any great Levies, it was the Custom at Rome for the Consuls to make them: Sometimes also the Military Tribunes did it, and when there was a Dictator he had that Office. But when the Territory of the Romans extended it self beyond *Italy*, the Proconsuls, Prætors, and other Magistrates then levied Troops in their respective Provinces. When the Consuls issued out their Edict for a Levy, all the Youth that were of Age were oblig'd to repair to the Place appointed, to neglect or conceal themselves from which was reckon'd a capital Crime.

II. But tho' they were thus oblig'd to appear at the Time and Place appointed, yet there were certain Cases wherein they were dispens'd with; as when they were to assist at the Funeral of one of the Family, or to celebrate the *Ferie Denicales*, (provided they did not purposely do it to avoid their Appearance) or in case of Sicknes, or of an Augury which might not be put off, or of an annual Sacrifice which must of Necessity be observ'd, or lastly of a private Quarrel with an Enemy, where a Man was to fight him. The Names of all were enter'd down in Tables at their Birth, as were also the Names of those that died, that no body might think to escape Notice by not appearing. They had a kind of Superstition, *Cicero* tells us, in chusing their Soldiers, namely, that the first they pitch'd upon, shou'd, for the sake of a good Omen, have a fortunate Name, as *Valerius*, *Salvius*, *Statorius*, the first of which is deriv'd à *valendo* from Valour or Might, the second à *salute* from Safety, and the third à *stabilitate* from Stedfastness or Firmness of Mind.

III. In these Levies they listed Men from seventeen to six and forty Years of Age, beyond which Age they never took any, unless in case of Necessity, or when they wanted Men. The first Cohorts of the Legions were made up of Men six Foot high, or five Foot ten Inches at the least: But here, by the way, it is to be remember'd that the old *Roman* Foot, which is thought to be much the same with the Modern one, was an Inch less than ours; so that their six Foot was but equal to five Foot and a half our Measure, and their five Foot ten Inches by consequence not much more than five Foot four Inches with us. *Suetonius* tells us those Men were reckon'd under-siz'd, that were but five Foot nine Inches high. The Way was to send Orders to the Præfects of the several Cities in Alliance, to furnish their Quota of Men by such a Day. The Number of their Cavalry was in Proportion to that of their Infantry.

IV. They took their Youth at the Age of seventeen to be train'd up in the Art of War; during all which time of Discipline they were maintain'd at the Publick Expence, but not enroll'd as Soldiers until they had taken the Military Oath: Nor were they allow'd to fight with the Enemy until they had taken it: Which Law was so rigorously observ'd, that *Posthumius* the Dictator and *L. Manlius Torquatus* put their Sons to Death for having violated it; for which Reason it was that *Cato* the Censor, seeing that his Son, who had serv'd in the Wars under *Paulus Æmilius*, and was disbanded with the Legion he serv'd in, was desirous to

continue in the Service, oblig'd him first to take the Oath again, the former Oath being after his Discharge no longer binding. It was not therefore without Cause that *Cato* oblig'd his Son to this, it being accounted Murder to kill an Enemy before they had taken the Oath.

V. The Form of this Military Oath is variously exhibited in various Authors. *Aulus Gellius* says it run thus; That they should never take any thing ten Miles round the Army, either by Fraud or Violence, alone or in Company, that exceeded the Value of a Piece of Money of one Day's Subsistence for every Day they were out, and that if they did take any thing above that Value, they should bring it to the Consuls, or restore it to the Owner; Spears, Staffs, Wood, Forrage, Bottles, Bellows and Faggots excepted, all which they were not obliged to restore. According to *Livy* the Substance of the Oath was, that they should never desert the Army out of Fear, nor quit their Ranks except to take or require some Arms, or to smite the Enemy, or to save a Citizen. But this Form was chang'd under the Emperors.

VI. Besides the Reasons above-mention'd for which some were dispens'd with from going to War, there were also others; as when they had made twenty Campaigns, or were above fifty Years of Age, tho' they had not made so many; those that had enjoy'd any Civil or Sacred Office; those that had been discharg'd from serving by publick Authority on Account of their Merit, and those also that were Lame or had lost a Limb. But these Exemptions from Service were not allow'd in urgent Cases; and in early Ages it appears, that, in the Wars with the *Gauls*, the Priests themselves were oblig'd to take up Arms with the rest. *Livy* calls those Volunteers, that serv'd in the Army after Exemption, and says, that such could not be oblig'd to serve. We find accordingly in *Gruter* one *Frontinus* a Veteran call'd *Voluntarius*.

C H A P. III.

I. *The Levies of the Cavalry.* II. *The Difference between the Allies and Auxiliaries.* III. *Who the Evocati were.* IV. *Three ways of making the Levies among the Romans.* V. *The Veterans, and the Beneficarii.* VI. *Several Classes of the Soldiers among the Romans; what the Velites, Hastati, Principes, and Triarii, were.*

I. **T**HE Cavalry was generally rais'd out of the Infantry, from whence they took such as had the best Estates, and out of them chose such as had the best Reputation for their Morals. Among the Horsemen they distinguish'd between those that serv'd *equo publico*, and those that serv'd *equo privato*, the last being allow'd to serve in the Infantry in case it happen'd that he wanted a Horse, whereas the first had every Year a certain Sum of Money given him to provide and maintain a Horse.

II. Among the Troops the Army was made up of, those that were not *Roman*, but of some other Part of *Italy*, were call'd *Socii* or Allies, and those of other Nations, Auxiliaries. The Allies had no other Consideration for their Service than an Allowance of Corn; but the Auxiliaries were allow'd Pay from the Republick. That however was not always uniform; for Foreign Princes oftentimes sent Auxiliaries, and maintain'd them at their own Expence. The *Italians* were all oblig'd to take the Oath, but the Auxiliaries not so.

III. The

III. The *Evocati*, as they were call'd, were Veteran Soldiers taken out of the Horse or Foot, from among the Citizens or Allies, Men of Wisdom and Experience. They were call'd *Evocati* from their being intreated into the Service again after they had serv'd all the Campaigns they were oblig'd to. They were excus'd from all the Military Drudgery, and keeping Watch, and had many other Privileges besides. The Name of *Evocati* was also given by the Emperors to a select Body of Horse Guards, mention of which is often made in Inscriptions.

IV. There were three sorts of Soldiers, or to speak more properly, three ways of raising them; namely by the *Sacramentum*, the *Conjuratio* and the *Evocatio*. The first was when Men came of their own accord to the Consul or General to offer their Service, and took the Oath voluntarily, never requiring their Discharge, or *exauctoramentum*, as 'twas call'd, until they had serv'd twenty Campaigns, or had receiv'd their twenty *Stipendia*, which amounts to the same thing.

The *Conjuratio* was, when in cases of Necessity the Consul or General went up to the Capitol, display'd a rose-colour Standard for the Foot, and a blue one for the Horse, crying out, *QUI VULT SALVAM REMPUBLICAM FACERE, ME SEQUATUR*: Let every one that regards the Safety of the Republick follow me. Which done, all they that had a mind to list themselves, ran thither tumultuously, and took the Oath of Fidelity, for which reason they were call'd *Conjurati*.

The *Evocatio* was when they sent into various Parts of the Country to recruit, or, as one may say, call for Soldiers. The Soldiery properly so call'd were they who took the *Sacramentum*: For as to the *Evocati*, whether Foot or Horse, they were taken both from the City and out of the Allies.

V. Those Soldiers that had serv'd out the time of twenty Campaigns were call'd Veterans. The *Beneficarii* were such as serv'd voluntarily, but yet with a view of purchasing thereby the Favour and good Graces of the Consuls and Generals, and also in hopes of Preferment. They were generally rang'd about the Colours, and were exempted from moulting Guard, and working at fortifications and Entrenchments. In cases of Necessity they had the Office of Centurions, and carried their Ensign the Vine Branch. The Word *Beneficiarius* has various Acceptations, so that Writers are not agreed in what Sense the *Beneficarii* above-mention'd are to be taken, all things being subject to various Changes at different Times.

VI. The Roman Soldiery was divided into several Classes, namely into *Velites*, or light-arm'd, *Hastati* or Pikemen, and *Principes* and *Triarii* or *Chiefs*; the last of which were so called because they made the third Rank, the *Velites* being not taken into the Number, as being the lowest and meanest Part of the Army, that fought at a Distance with Slings and Javelins. We shall see some of these among the Monuments below. They were also sent to view the Enemy and skirmish with them, and sometimes also fought in the Rear of the Legions.

The *Hastati* were so call'd from the *Hastæ* or Pikes that they carried. These were for the most part young Men, and in Engagements were plac'd in the first Ranks, to stand the first Attacks of the Enemy. In Monuments of later Ages, from the time of the Emperor *Titus* down to *Theodosius*, there's but one sort of Pike observable, which scarce exceeds in Length the Stature of a Man, being not above six of our Feet. Both Officers and Soldiers carried the Pike indifferently.

The Pikemen or *Hastati* charg'd before the *Principes*, who were arm'd with Sword and Buckler; and who as some say carried the Pike too as well as the *Hastati* we have been speaking of; which agrees well enough with the Monuments that now remain. In each Legion there were fifteen *Centuriæ* of these *Principes*.

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The *Triarii* were Veteran Troops, and so call'd from their Position, being marshall'd in the third Rank, as the Strength of the Legions. They were arm'd with the Sword and *Pilum*, which was a kind of short Pike or Dart. Their military Habit will be represented below. Their Way was to fix their Shields and Darts in the Place where they were marshall'd, and to kneel with the right Leg upon the Ground, waiting in that Posture for the Signal to fight. They were sometimes call'd *Pilani*, from their Weapons the *Pila*.

C H A P. IV.

I. The Division and Subdivision of the Legion: the Number of Soldiers in each Legion. II. The several Names of Legions, and the Origin of these Names. III. The Division of the Cavalry into Wings. IV. The Pretorian Cohorts, and those called Urbanæ, or City Cohorts. V. Who were the Generals of the Roman Armies.

I. THE Roman Legion was divided into sixty *Centuriæ*, thirty *Manipuli*, and ten *Cohorts*. The *Cohort* consisted of six hundred Men, the *Manipulus* of two hundred, and the *Centuria* of one hundred. The *Manipulus* therefore was compos'd of two *Centuriæ*, each of which had its Centurion. The number of Men in a Legion was not always the same: For at first it had not above three thousand Men in it, but afterwards the Number was augmented to four, five, and six thousand. The Legions are found to be thirty in number in the Medals of *Marcus Antoninus*: But an Inscription, publish'd by *Fabretti*, makes mention of a fortieth. *Appian* also says that the number of Legions was forty three; but that it was reduc'd afterwards by *Augustus*.

II. In the Time of *Vespasian* there were seven and thirty Legions, distinguish'd by the Name of first, second, third, &c. according to the Order of Time when they were rais'd. They had also a sort of Surname besides, either from the Provinces where they had serv'd, as *Gallica*, *Italica*, *Germanica*, *Pannonica*, *Britannica*, *Hispanica*, *Macedonica*, *Parthica*, *Scythica*; or from the Names of particular Deities, as *Martia*, *Apollinaris*, *Minervia*; or of the Emperors, as *Augusta*, *Claudia*, *Flavia*, *Antoniniana*; or from some peculiar Quality, as *Rapax*, *Victrix*, *Fulminatrix*, *Ferrea*, *Pudica*, *Salutaris*, *Adjutrix*, &c.

III. The *Alæ* or Wings of the Cavalry were divided into ten Troops of thirty Horse each, call'd *Turmæ*, so that a Wing consisted of three hundred Horse in all. The number of Troops in each Wing answer'd to that of the *Cohorts* in a Legion. These Troops or *Turmæ* were again divided into three *Decuriæ*, which, as the Name imports, consisted of ten Horse. The Auxiliary Forces both Cavalry and Infantry were commonly placed in the *Alæ* or Wings, and forasmuch as their Cavalry was more numerous than the Roman those *Alæ* consisted of six hundred Horse; the Reason of which was, because those Troops being rais'd in the Country, they could by consequence furnish a greater number of Horse than the City.

IV. The *Pretorian Cohorts*, according to *Dio*, were ten in number, each consisting of a thousand Men, as *Augustus* had fix'd it. But *Tacitus* makes them no more than nine hundred; and in that is follow'd by *Lipsius*, who says that *Dio* was mistaken, and that *Tacitus* ought to be believ'd. *Fabretti* however is of Opinion that they were both in the right, and that they spoke of *Cohorts* of different

ferent times. The same Difference is observ'd in the Account of the *Cohorts* call'd *Urbanæ*, or *City Cohorts*: For *Dion* makes four of them, consisting in the whole of six thousand Men; whereas *Tacitus* makes but three of them; tho' in another place he takes notice of sixteen *Pretorian Cohorts*, and four *City Cohorts*, each of which consisted of a thousand Men. An Inscription in *Gruter* under *Nero* makes mention of a sixteenth *City Cohort*; which shews plainly that the number of *Cohorts* was subject to various Changes. But here *Fabreti* is also of Opinion, that these sixteen *Cohorts*, tho' call'd by the Name of *Urbanæ*, comprehended also the *Pretorian Cohorts*, and that they reckon'd them both together, which is very probable.

V. The military Order observ'd, with regard to the Officers of the Army, was this. The Generals or chief Commanders in the time of the Republick, were the Dictator, when there was one, the Consuls, the Pro-consuls, the Pretors, and the Pro-pretors. The Name of *Imperator* was common to those that had the chief Command of the Forces: *Cicero* calls the *Imperator* the Administrator of the War. The Troops also gave the Name of *Imperator* to their Commanders after any remarkable Exploit, as a Mark of Honour. The Generals had by way of Distinction the Lictors to attend them with their *Fasces*, and were habited in a *Paludamentum*, which was a kind of Cloak. Under the Emperors however these things underwent various Changes, not easy to be related. Besides the *Imperator*, there were also the *Legati*, whose Office both under the Republick and the Emperors, was to advise and assist the General in his Councils; and in his Absence to command in his place, and that with all the *Insignia* of the General's Office. The number of *Legati* was not fix'd and certain, there being sometimes as many as there were Legions in the Army, that is, one over every Legion. Under the Emperors also the *Legati* were sometimes sent to command the Forces.

C H A P. V.

- I. The Subaltern Officers: the Tribunes who commanded the sixth Part of a Legion. II. Several sorts of Tribunes, and their Duties. III. The Centurions. IV. The Succenturions or Options. V. The Bearers of the Ensigns, the Suboptions, and others. VI. The Body-Guard of the Emperor. VII. The Master of the Horse in ancient Times.*

I. **N**EXT to the Generals of the Army were the Tribunes, who were six in number to every Legion. They owe their Name, it's thought, to the Legion's being anciently compos'd of three thousand Men, over which they had the Command, taken out of the Tribes of the *Ramnenses*, the *Luceres*, and the *Tatienses*. When the Legion was augmented to six thousand, there were then six Tribunes appointed, who commanded each of them a thousand Men. The first of the Tribunes were instituted by *Romulus*: But in the time of the Republick they were created by the Consuls for some time; after which the People assum'd the right of making them.

II. The Tribunes were of two sorts, the one Knights, and the other *Plebeians*. In time of War the Tribunes were taken from among the Senators call'd *Laticlavii*, whereas the Knights were call'd *Angusticlavii*. These Names were given them

them from the Habits they wore; describ'd above in the preceding Volume. The Business of the Tribunes was to decide all Controversies in the Army, to give the Watch-word, to appoint the Guard, and to take care of the Works and Camp. They had the Honour of wearing a Gold Ring, a Privilege that also extended to the *Equites*, whereas the Soldiers wore only an Iron one. Their Habit, as well as that of the Centurions, was distinguish'd from the Habit of the Soldiers. They had also anciently Apparitors to wait upon them, as the General had; but that Mark of Honour was taken from them in After-times.

III. The Centurions were chosen by the Tribunes, with the Consent of the Consuls, in the time of the Republick, and of the Emperors afterwards. In the Election of them some Regard was had to the Quality of the Person; tho' sometimes Soldiers of Fortune arriv'd by degrees to that Dignity by their gallant Actions: Such were therefore call'd *Promoti*. It has been already observ'd, that a Legion consisted of thirty *Manipuli*, and each *Manipulus* of two *Centuriæ*, over which a Centurion presided. Now it being the Custom to chuse out of each *Manipulus* two Centurions, it follows that the Centurions were sixty in all; the first chosen thirty of which were call'd *Primipili*, and had a sort of Pre-eminence over the other thirty of the second Election. The Badge of the Centurion's Office was the *Vitis*, or Rod of a Vine-branch.

IV. The Centurions being thus chosen, elected in their Turn certain Officers to serve in the Rear of the Battalions, who were a kind of Lieutenants and Deputies under the Centurions, and call'd *Succenturiones* or *Optiones*; which last Name is often met with in antique Inscriptions, and seems to be deriv'd from their being the Option or Choice of the Centurions: From the Word *Succenturiones* comes also *Succenturiatus*, made use of by *Terence*, which signifies a Man appointed to supply another's Place upon occasion. These were anciently call'd *Accensi*; tho' others think those Soldiers were call'd *Accensi*, that fought with Slings and Stones, and had their Station in the last Rank of the Soldiery. *Asconius* however says that they had some better Rank in the Army. But however that be, Care must be taken not to confound these *Accensi* with others of that Name, who were a sort of Sergeants or Criers to the Magistrates, and much the same with those they call'd *Apparitores*. The *Rorarii* were of the Number of the light-arm'd Soldiers, and by *Livy*, who mentions them in two places, reckon'd superiour to the *Accensi*.

V. The Centurions and *Optiones* chose together two Ensigns call'd *Vexillarii*, that in case of Sicknes or Absence the one might be ready to supply the place of the other. Besides the *Optiones*, there is mention made in Monuments of *Suboptiones*, who were a sort of Lieutenants to the first. The Centurions held the first Ranks in the first *Cohort* of a Legion, and two of them the place of the two first *Hastati* or Pikemen. The first amongst the *Principes*, was also a Centurion. The *Primipilus*, or he that they call'd *Centurio Primipili*, was as it were the Prince or Chief of the Centurions: For besides that he commanded a *Centuria*, he also gave the Word of Command by Order of the General or Tribunes, the Army marching or halting at his Command. 'Twas he also that had the Care of the Eagle or chief Standard, that took it away from the place where it was fix'd when they were to march, and gave it to the Standard-bearer, and defended it in an Engagement.

All these Officers were anciently distinguish'd by their Habits; but upon the Columns of *Trajan* and *Antoninus* there's no visible Difference in the Habit, except in that of the head-Officers and Tribunes, which is pretty much the same with the Emperor's, and differs from it only in Colour. All the other Differences of Habit are between the light-arm'd and the heavy-arm'd. The Ensigns and
Trumpets



Trumpets are only distinguish'd there by a Lion's Skin which they have upon their Head.

VI. The Emperors had their Body-guards call'd *Speculatores*, which occur by that Name also in Inscriptions, and are observ'd below in the Images taken from the *Trajan Column*. They had also the Name of the Emperor's Body-guard, as we find it express'd in several Inscriptions produc'd by *Fabretti* in his *Trajan Column*: *Neronis Caesaris corpore Custos, Claudii Caesaris Augusti corporis Custos*. They had also certain Officers call'd *Stratores*, who were a sort of Ecquerries, a Post in the last Ages of the Empire held among the most considerable, as may be seen in the *Theodosian Code*. They provided Horses for the Army, saddled the Emperor's Horse, and held him when he mounted. But it may be this Post was not so considerable in the first Ages of the Emperors. We find also these *Stratores* in the *Trajan Column*.

VII. The *Magister Equitum*, or Master of the Horse, was a considerable Post in the time of the Republick. In the great Wars, or when there was a Necessity for a Dictator, he was allow'd an Adjutant, call'd *Magister Equitum*, which he generally chose the first thing he did after he was made Dictator. This Master of the Horse was almost of equal Authority with the Dictator, and commanded not only the Cavalry, but also the *Accensi*, or *Succenturiones*, as *Varro* informs us. But it does not appear that this Post was continued under the Emperors.

CHAP. VI.

I. *The military Habit of the Greeks and Romans, very like each other.* II. *A Statue of Pyrrhus in a Military Habit.* III. *Another Statue of Telamon with his Wife Hesione.* IV. *An Image of Ptolemy Evergetes in a Military Habit, taken from two MSS.*

I. **W**HAT has been said hitherto may serve as a Preliminary toward the understanding of what follows concerning the military Habit and Arms, both offensive and defensive, of the *Greeks*, *Romans* and other Nations. We shall begin with the *Greeks*, according to Custom, and then proceed to the *Romans*, who borrow'd their Arms, Habits and other Usages from the *Hetruscans*. *Tarquinius Priscus*, a Native of *Corinth*, as *Florus* says, was made King of *Rome*, and introduc'd the Manners of *Greece* among the Arts and Customs of *Rome*. The same *Tarquin*, continues he, subdued twelve People or Nations of *Tuscany*, from whence came the *Fasces*, the *Trabeæ*, the *Curules*, the *Annuli*, the *Pbalææ*, the *Paludamenta*, and the *Pretextæ*: Thence also came the Custom of triumphing in a golden Carr, drawn by four Horses, the painted *Toge*, and the *Tunicks* adorn'd with Palm-branches. All these the *Romans* borrow'd from the *Tuscans*, and the *Tuscans* a great part of them from the *Greeks*; for which Reason it was that *Pyrrhus* going to make War upon the *Romans*, whom the *Greeks* look'd upon as a barbarous People, as well as all other People that were not of their own Nation, and seeing their Camp and Ordinance, said that it was not the Ordinance of a barbarous People.

II. The first Figure we here exhibit is *Pyrrhus* himself, as he is represented in the Palace of the *Maximi*, one of the most illustrious Families of *Rome*. His Helmet is adorn'd with three Birds, the middlemost of which serves for a Crest;

'tis also very deep, after the manner of the *Greeks*. The *Romans* however sometimes us'd such sort of Helmets, especially in the Figures of the Goddess *Rome*. The Thorax or Coat of Mail is adorn'd with a *Medusa's* Head and two *Pegasi*. From the Girdle downwards there hang Bands or Fillets, as we see them in heroick Habits. The Dress from the Legs is the *Campagus* or *Ocrea*, call'd by the *Greeks* *χιμῆς*: His Toes appear all naked: His Shield is a *Hexagon* and Oblong, and compar'd with the Statue seems to be about three Foot long. He has on a kind of Cloak, call'd by the *Greeks* *Chlamys*, which pretty much resembles the *Paludamentum* of the *Romans*. In his right Hand he holds a Truncheon, and in his left a Shield that rests upon the Ground.

2 III. The Military Habit of *Telamon*² taken from a *Roman* Marble, differs in nothing from the last, save that it is something more plain and simple. *Telamon* is here represented with his Wife *Hesione*: He has a Belt or Girdle above his Coat of Mail: At his Feet are his Helmet, not altogether so deep as *Pyrrhus's*, and his Sword, the greatest Part of whose Blade is conceal'd behind *Telamon* and *Hesione*, which appears to be very long, and not unlike that of *Prusias*, another *Greek* exhibited in the preceding Volume: His Shield is Oval and resembling a great Basson; and his Greaves or Boots, call'd by the *Greeks* *χιμῆς*, are close at the bottom.

3 IV. To these Figures we subjoyn that of *Ptolemy Euergetes*³, the Son of *Ptolemy Philadelphus*, and Grand-son of *Ptolemy* the First, the Son of *Lagus*. 'Twas taken from *Cosmas* the *Ægyptian*, who painted it from a Statue of that King plac'd near *Axumis* in *Ethiopia*, now call'd *Abissinia*, where that Prince had made some Conquests, as a certain Inscription imports which I have printed in *Collect. nova* p. 141. more correct than it was heretofore. The Image of *Ptolemy* arm'd is there seen as he is here represented: 'Tis found in a *Vatican* MS. of near a thousand Years old, and in another in the Library of *S. Laurence*, from which two MSS. I publish'd the *Christian Topography* of this *Cosmas* above-mention'd, an *Egyptian* Monk. This Military Habit is more simple than the preceding ones: The Shield is oval, and exactly like that of *Telamon's*; but the Spear is longer than his by about a Foot. The original Figure is too small to express all the several Parts that compose the Military Habit. 'Tis so nicely fitted to the Body, that from Head to Foot the whole Form appears as if he was naked.

C H A P. VII.

I. The Military Habits of Julius Cæsar, Augustus, and another Emperor. II. Of Marcus Aurelius, and some others. III. The Military Habits of Emperors, and Principal Officers, from Trajan's time, down to Constantine successively. IV. The Winter Military Habit of Trajan, and the Principal Officers of his Army.

THE Conformity of the Habits of those two *Grecian* Heroes, *Telamon* and *Pyrrhus*, to those of *Julius Cæsar* and *Augustus*, hereafter exhibited, inclines one to think that the Military Habits of other *Greeks* of lower Rank were also agreeable to those of the *Roman* Soldiers: Nor is it to be doubted but that the *Romans* took their Habit from the *Greeks*, as well as they did other Usages both from the *Tuscans* and *Greeks* that inhabited in *Italy*. The Military Figure of



Montfaucon



Montfaucon



Raccolta Maffei



Trajan's Pillar



Trajan's Pillar



Trajan's Pillar



Trajan's Pillar



Constantine Arch

Plate 2

of *Julius Cæsar* ⁴ is very like the preceding Figures. His Coat of Mail is all adorn'd with Figures, as Griffins and other Images: The *Paludamentum* is longer than ordinary: He is girt about the *Thorax* as *Telamon* is. In the Statue of *Augustus* ⁵ the Coat of Mail down to the Waste is very simple, insomuch that all the Motions of the Body appear as plain as if it was naked: The *Paludamentum* pretty much resembles that of *Julius Cæsar*. What's observable in both is, that part of the Foot in each appears naked, which is often seen in Heroick Habits. There's some reason however to believe that these Feet which seem naked were not always really so; but that they sometimes wore a sort of Pumps adjusted to the Toes, as Gloves are to the Fingers. This kind of Greaves or Buskins of *Julius Cæsar*, *Augustus*, and the other Emperor exhibited with them, is what they call'd *Campagus*. *Augustus* holds here a small Sword, which I take to be what they call'd *Parazonium*. The *Chlamys* or *Paludamentum* of *Julius Cæsar*, and *Augustus*, are longer than those of the following Emperors. The other Emperor ⁶ in the same Plate very much resembles, in Habit, *Julius Cæsar* and *Augustus*. If there's any Difference, the Reader will observe it.

II. In the following Plate the *Marcus Aurelius* taken from our Cabinet, is remarkable ^{PLATE II.} for the manner of his wearing the *Paludamentum*, the foldings of which are better observ'd with the Eye in the two Representations of the Figure, than in all the Descriptions that can be given of it. He has in his Hand a *Parazonium*, but it's broken. The following Emperor ² has upon his Cuirass two Victories, and holds a *Parazonium* as *Marcus Aurelius* does. One thing remarkable in these Images is, that the Cuirass having no Figures upon't, is so nicely adjusted to the Body, that the whole Form of it appears thro' it, as the Breasts, Muscles, Navel, and whatever else is observable in a naked Man from the Girdle upwards. Nor is this only observable in *Marcus Aurelius*, but in many of the following Figures also.

III. The following Part of this Plate is very extraordinary and worth Observation, for it exhibits the Military Habit of the Emperors and principal Officers, from *Trajan* down to *Constantine* inclusively. The Military Habit of *Trajan* is often seen in his Column pretty much resembling the preceding Habits, with this Difference only, that instead of the Bands or Fillets that hang from the Girdle of those, here's ³ a Piece of Stuff divided in the Middle, with a kind of Galloon or Fringe. The Officers besides him, *viz.* the Prætors, Tribunes and others, are all habited exactly like him without the least Difference. *Trajan* is again represented alone ⁴, with his Hand extended like one that was giving Command, and with a Scroll in the other, as it often occurs elsewhere. In another Image *Trajan* holds a Sword in his Hand sheath'd ⁵, and turn'd towards his Breast.

IV. Besides this Military Habit, he is sometimes exhibited with another different enough, which seems to be design'd for Winter. The Emperor ⁶ is here more wrapt up than in his ordinary Habit, as are also the Officers and Soldiers, as is customary in the Winter Season, for their Defence against the Inclemency of the Weather. The Emperor *Marcus Aurelius* is also seen upon his Column, as we here represent him ⁷. About him are certain Officers a little differently habited: The Spear in his Hand, which is very short, seems to be a *Pilum*: he differs a little from *Trajan* in that which hangs down from his Cuirass. The *Septimius Severus* that follows ⁸ differs not much in his Military Habit from the Emperor *Trajan*; but the Tribunes that accompany him are cloath'd in another manner. The next is *Constantine the Great* ⁹, habited almost in the same manner as the preceding Emperors. His oval Shield, if compar'd with the Height of the Statue, seems to be something above three Foot high. *Theodosius the Great*, whom we shall see amongst the Cavalry, has a Military Habit on, in which there are seen the Re-

mains of polite Antiquity, which ceas'd with him. For after his time Barbarity overspread the World, and the little that remains of those later Ages is so very rude, that one may easily perceive all Arts were at an end.

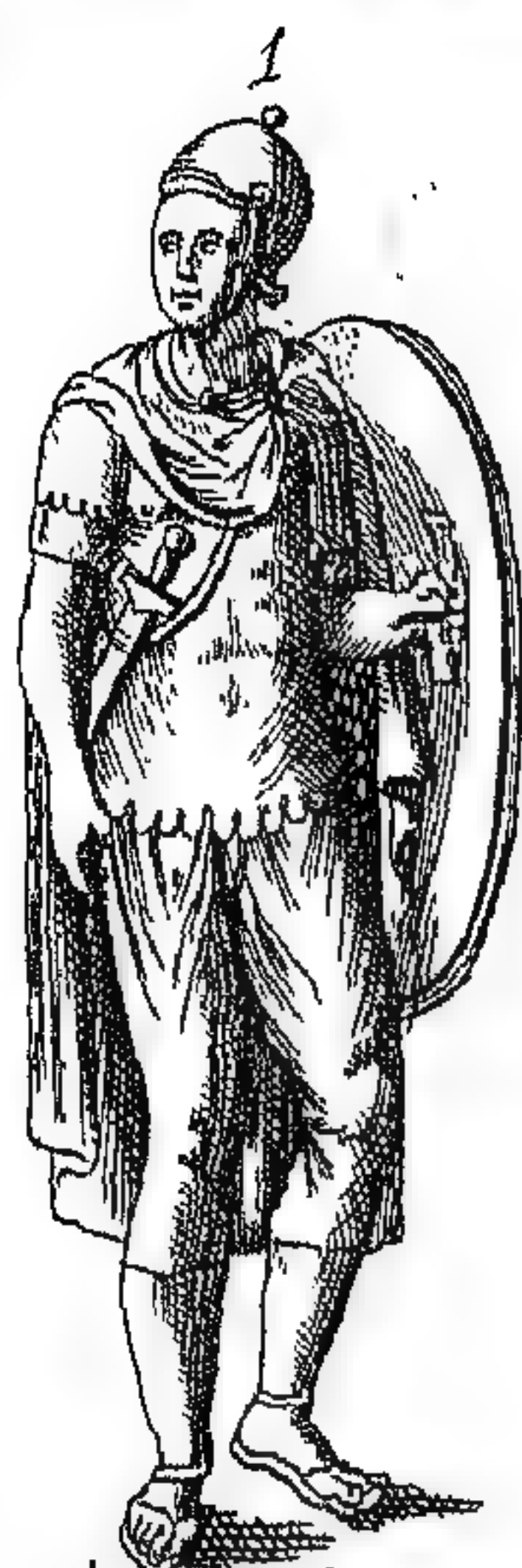
C H A P. VIII.

I. *Two sorts of Habits of the Roman Soldiers on Trajan's Pillar.* II. *The Military Habits of the Roman Soldiers, from Trajan, down to Theodosius the Great.* III. *Other Soldiers of an uncertain Age, some of which seem to be of the time of the Roman Commonwealth.*

I. **W**E have just observ'd that the principal Officers and Tribunes upon *Trajan's Pillar* are habited exactly like the Emperor, without any Difference. But we do not find there is the same Conformity in habit among the Soldiers: For there are two sorts observable with them, namely their ordinary Habit, and the Habit they us'd to wear in cold Weather, which is not unlike that of the Emperor above. The ordinary Military Habit is of two sorts: The Cuirasses of the one are more simple, short, and light, and the Shields of an oval Form; so that some have taken the Men in this Armour for the *Velites*: But as *Fabretti* has very well observ'd, tho' they are something more lightly arm'd than the rest, yet is their Armour too weighty to bring them under the Denomination of *Velites*. The other sort of Military Habit is a weighty one, and was worn by those that were said to be the Strength and Support of the Legions: These were girt about the Reins with a sort of ~~leathers that run up in several Folds~~ as high as the Armpits, and had a sort of Shields that were hollow like a Tile. The Ensigns and some Subalterns have instead of a Helmet, or it may be upon the Helmet, the Skin of a Lion's Head with the Mane, which renders them very formidable. 'Tis to be observ'd that the Cavalry is habited exactly like the first Soldiers we have been taking Notice of, as shall be again observ'd in the Chapter of the Cavalry.

PLATE
III.

II. *Livy* speaking of the Military Habit given to the *Roman Soldiers* by *Servius Tullius*, says that he order'd them for Armour a Helmet, a Shield, *Ocreæ* or Boots, and a Cuirass of Brass. But since then the Armour was chang'd with regard to the Matter of it, and the Form too in all probability, The Changes however that it underwent from *Trajan's* time to *Theodosius*, were not very considerable, as may be seen in the following Plate. The first Soldier with an oval Shield¹ was taken from *Trajan's Column*, as well as the other four: He is not arm'd so heavily as the two that follow, and wears his Sword upon his right side. The two² next that are more heavily arm'd² and girt about the Breast, as it's thought, with Thongs, carry the Shield in the Posture of Combatants: the Shield is of that sort above-mention'd, hollow like a Tile. The two next are an Ensign³ call'd *Signifer*, and a Trumpet⁴, whose Military Habit we leave the Reader to consider: All that's remarkable therein, is the Skin of a Lion's Head with its Mane, worn as a covering for the Head; but this is what will often occur. The two next Soldiers⁵ are taken from the Column of *Antoninus*, and represent the Military Habit, as it was in the time of *Marcus Aurelius*. The Spears, which seem shorter than those in *Trajan's* time, are perhaps of that sort call'd the *Pilum*. One of these Soldiers has a scaly Cuirass, which must be distinguish'd from those call'd *Hamatæ*, which were properly Coats of Mail. Their Shields are oval, of which
fort



Trajan Pillar



Trajan Pillar



Trajan Pillar



Trajan Pillar



Anthony's Pillar



Severus's Arch



Constantine's Arch



Theodosius's Arch



M. de Moulour



Beger



Cab du P. Albert



Admiranda Rom



18



La Chausse



Bonanni



Narbonne



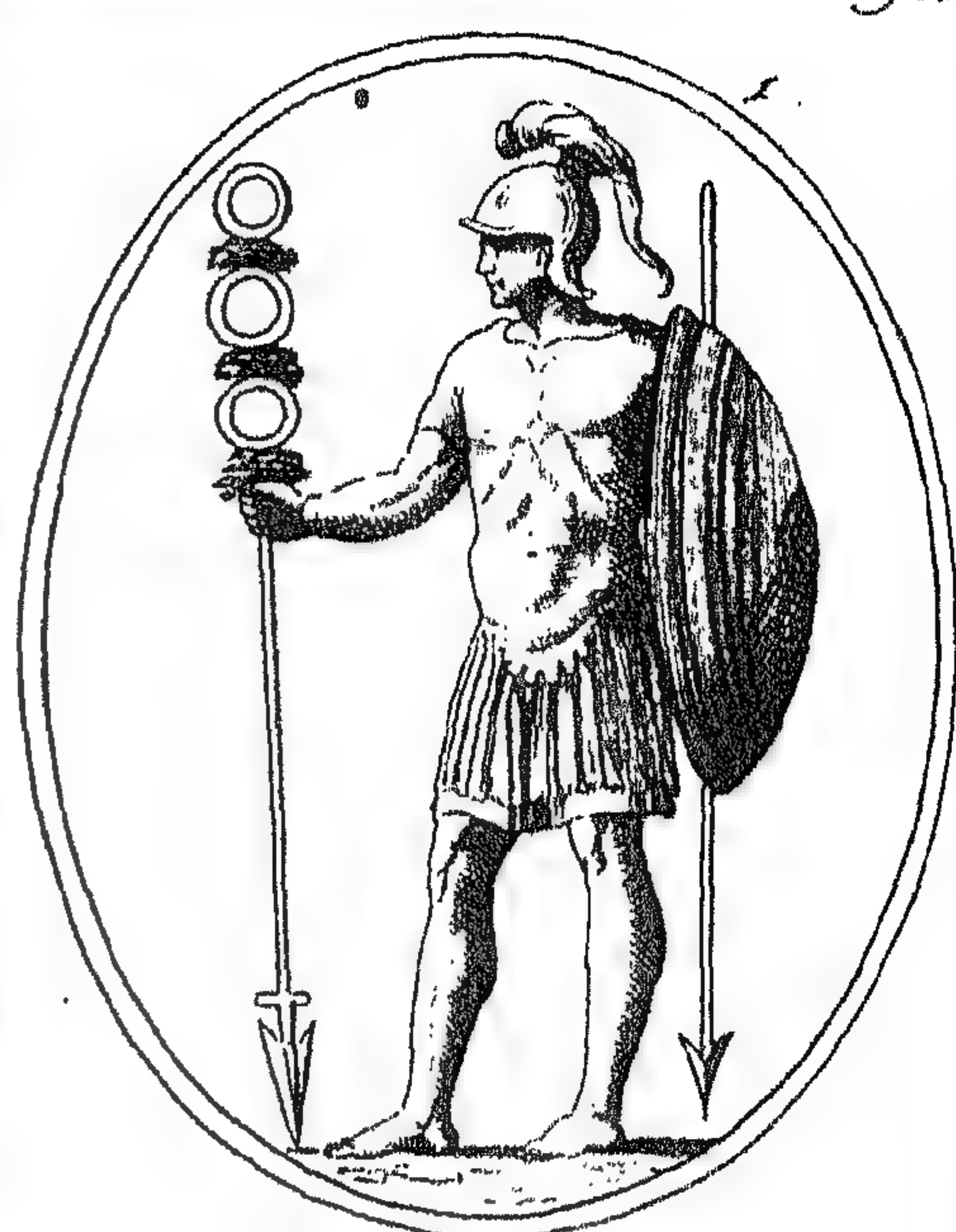
Bonanni



Dom Emmanuel Marti



AVR. IVL. IANVS. BVOK. EX BNE.
SALATOR. VIII. CHOR. III. VIX
ANN. XXXII. MIL. ANN. XXVIII.
NAT. DACIA. IVLIA. VRSA.
PATRI. B. M. F.
M' Fabretti



Maffei



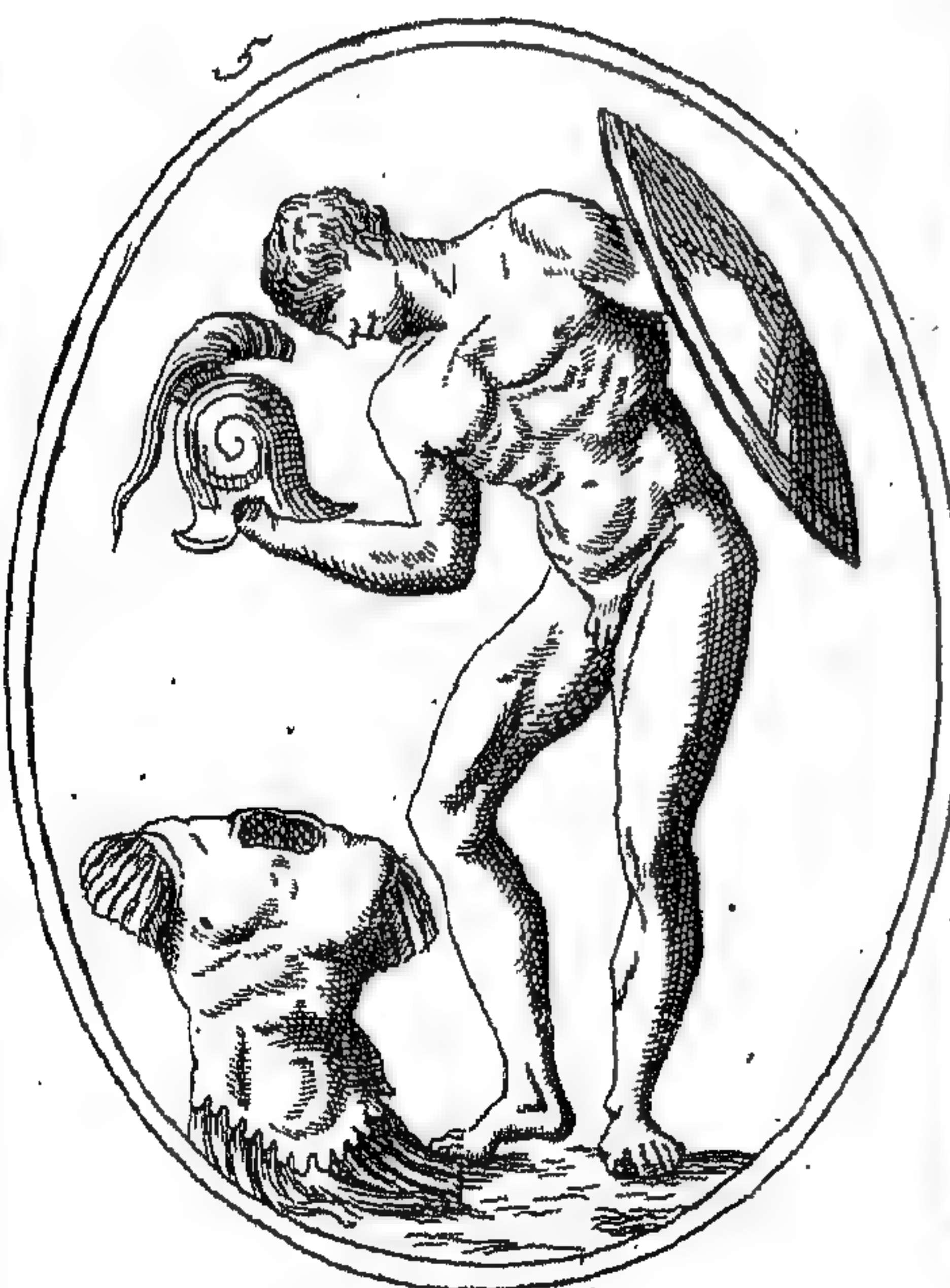
Maffei



Maffei



Maffei



Maffei



MAVR INCIANO MILITI COHVLER. S.
ALEXANDRIN VIX ANN XXVIII
MIL ANN VI HORIVNDVS EX
PROVINCIA DACIA. C. VIBIVS
VRBICVS. HERCO MANIFVLO
B. M. F.

Boissard



DIogenES GAIVS MIL. COHVLER. S.
VRANIDE. VIX ANN. XL. MIL. A. XIII. NA
TRAX. CIVITATE SARDICA. AVR. ERODES
MIL. COHVLER. SVBITATI FRATER
B. M. F.

Boissard

fort there are many more in the Column of *Antoninus* than in *Trajan's*. The two Soldiers that follow are from the Arch of *Septimius Severus*⁶, one of which has a hexagon Shield, and the other an oval one: This has also a Helmet with the Point bending forward from behind, after the manner of the *Tiaræ* of the *Parthians*, with whom *Septimius Severus* was then at War. The next Soldier is of *Constantine's* time⁷, and is remarkable for his great oval Shield, which if it be proportion'd to his Stature, must be above three Feet in Diameter. The following Soldier belongs to the Age of *Theodosius the Great*⁸; his *Paludamentum* is cut all round the Border like Fringe; his Sword is so short that the Blade is not so long as his Hand; his Legs and Feet are also dress'd differently from those that went before.

III. All the Soldiers we have hitherto exhibited in this Plate, have some certain Marks about them, by which we may know the Time to which they belong. But this is not the case of the following ones, whose Age we know nothing of. However, we imagine the first⁹ belongs to the time of the Commonwealth Government. The Military Habit is more simple and unadorn'd; the oval Shield seems to be above three Foot long. He who follows is remarkable for the Dress of his Legs and Feet¹⁰: The next, who is taken from the Cabinet of Mr. *Moreau de Mantour*¹¹, has Stockings on which come down to his Ankle, but no Shoes: He has a Bird upon his Helmet, instead of a Plume of Feathers. *Beger* publish'd the following Figure for a Bust of *Scipio*¹²: But that seems doubtful: He says the Belt was in use in *Scipio's* time, and this here has one of them; but this is no more than a slight Conjecture. The Lion represented at large lying upon a Helmet, is no Mark or Sign of *Scipio*, tho' *Beger*, pretends it is: Besides, the Hair is by no means of the *Roman* Cut, so that upon the whole, I think the Matter is altogether uncertain.

Of the following Soldiers in this Plate, the first¹³ has nothing remarkable but the Cuirass, which is so nicely adjusted to the Body, that the Shape down to the Waste appears perfectly. Another has a Belt on¹⁴, and holds a short Sword, which seems to be a *Parazonium*: His Legs and part of his Thighs are naked. The next¹⁵, which is a *Narbonnensian* Figure, is altogether extraordinary: His Military Habit pretty much resembles the Military Winter Habit which we see upon *Trajan's* Column: The Form of his Helmet and Sword is yet more remarkable; and what he has upon his Legs seems to be no more than a pair of strait Stockings that reach up to his Thighs. The naked Soldier¹⁶ holding a Helmet and Balance, was publish'd by *Maffei*: The thing is Symbolical and may signify what we please. The next is the Image of *Mutius Scaevola* burning his Hand in the Fire of the Altar¹⁷; which Representation is elsewhere found in old Monuments. The following Soldier¹⁸, of whom we have nothing but the *Busto*, seems to have too much Beard and Hair for a *Roman*.

The following Ensign¹ has his Colours upon a Pike, whose Point is at the lower end of the Staff: His Shield is very hollow, and of a sort that often occurs. Another Soldier has the same sort of Shield², but his Sword is not of the same Form with those that went before. Another³ carries his dead or wounded Comrade upon his Shoulders. What is meant by the naked Soldier⁴ with a *Chlamys* upon his Shoulders, and holding a Spear and Helmet, I know not. The other Soldier seems to be putting on his Armour⁵, for he has in his two Hands a Shield and Helmet, and at his Feet a Cuirass, and has from the Waste upward the perfect Form of a naked Man, as we have seen above.

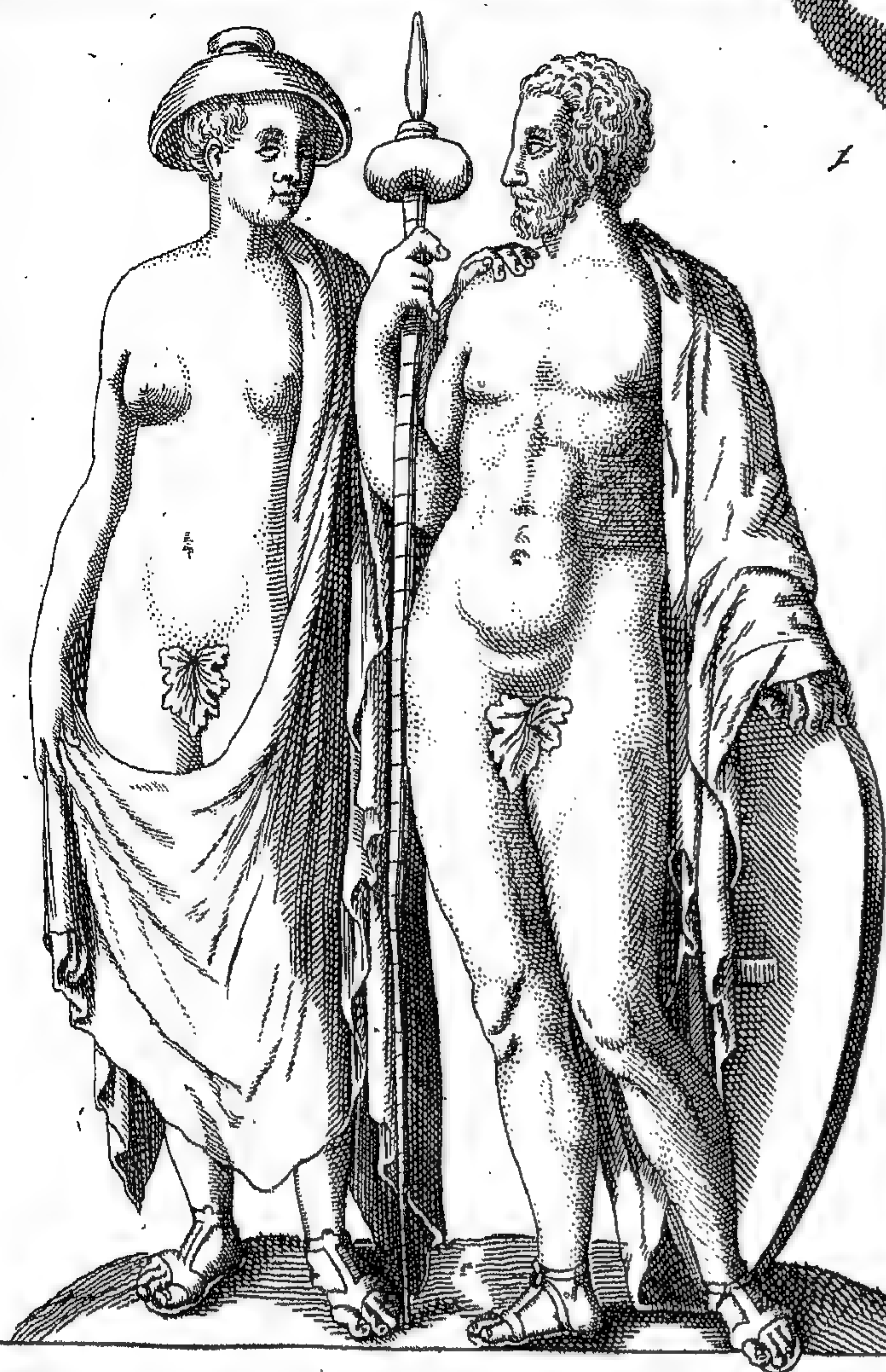
C H A P. IX.

I. *The Habit and extraordinary Arms of a Soldier named Marcus Aurelius Lucianus.* II. *Another Soldier cloathed and armed after the same Manner, and named M. Diocles.* III. *Another named M. Navius Thales, and some others.* IV. *Hetruscan Soldiers.* V. *Other Hetruscan Soldiers very different from those before.*

I. **W**E have here a sort of Soldiers taken from authentick Monuments, whose Habit and Arms are something uncommon. The first that's represented is *Marcus Aurelius Lucianus*⁶, a Native of *Dacia*, and Soldier in the seventh *Alexandrian Cohort*: His Habit is a Tunick, tied with a Girdle, and above that a Cloak or *Chlamys* fring'd: His Legs and Feet are dress'd pretty much after the modern Fashion; but what he has most extraordinary are his Arms: For he holds a Spear, the Staff of which is round, but yet with some Inequalitiès, and grows taper by degrees until it terminates in a Point: Between the Staff and the Point there's a kind of Globe. All that can be said, in my Opinion, with Probability of this Spear, which we meet with four times in these Plates, is, that it is one of that sort they us'd to carry their Colours upon; and indeed we do find in the *Trajan Column* some Ensign Staffs with such Globes as these upon them: But what's a little embarrassing herein is, that in the Inscriptions which accompany these four Figures, there's not any mention of either *Signifer* or *Vexillifer*. His Sword has no Resemblance with any other that Antiquity has transmitted to us: The Handle of it is bent back at the top, and the Blade appears to have been two Foot long. ~~But besides this Sword which he wears upon his left Side, he has~~ in his right Hand another Weapon, not unlike a Spear, but shorter by two thirds, the Staff of which is round, and has a Globe or Ball upon it like the former, and terminates in a Cone. Towards the Head of this *Lucianus* is the Sun on one side, and on the other the Moon. The other Soldier, whose Name is *Diogenes Gains*⁷, is arm'd in like manner, and has a Spear with a Globe upon it, but much larger, the Point above which Globe is very short. He has no Sword on, but instead of it has a round Weapon of a Conick Figure hanging by his side, and in his left Hand holds a Scroll. His Tunick is girt about the Waist, and fasten'd with a round Buckle.

PLATE II. *M. Diocles*¹, who comes next, was a Soldier in the seventh *Macedonian Cohort*. The numerical Mark 7. was added by *Beiffard*; for in the early Ages they knew nothing of our Cyphers: But perhaps this might be no Cypher, but only one of those little Marks which the Ancients us'd to place in Inscriptions. This *Diocles* has the same sort of Spear with those before; and is habited in a *Chlamys*, which covers not his Nakedness: His oval Buckler seems to have been three Foot in diameter, if taken the long way. On one side of him is his Wife with her Hand upon his Shoulder, habited in a Cloak, but so as that her Nakedness is also uncover'd: She has upon her Head a large Cup inverted, which probably serv'd both as a Bonnet, and as an Utensil to drink in. The next Figure² is *Quintus Ingenius*, a Veteran, who has no sort of Weapon about him, but holds only a Scroll in his Hand: What's most remarkable in him is the Dress of his Legs, which comes much nearer that of our Days than any I have yet seen.

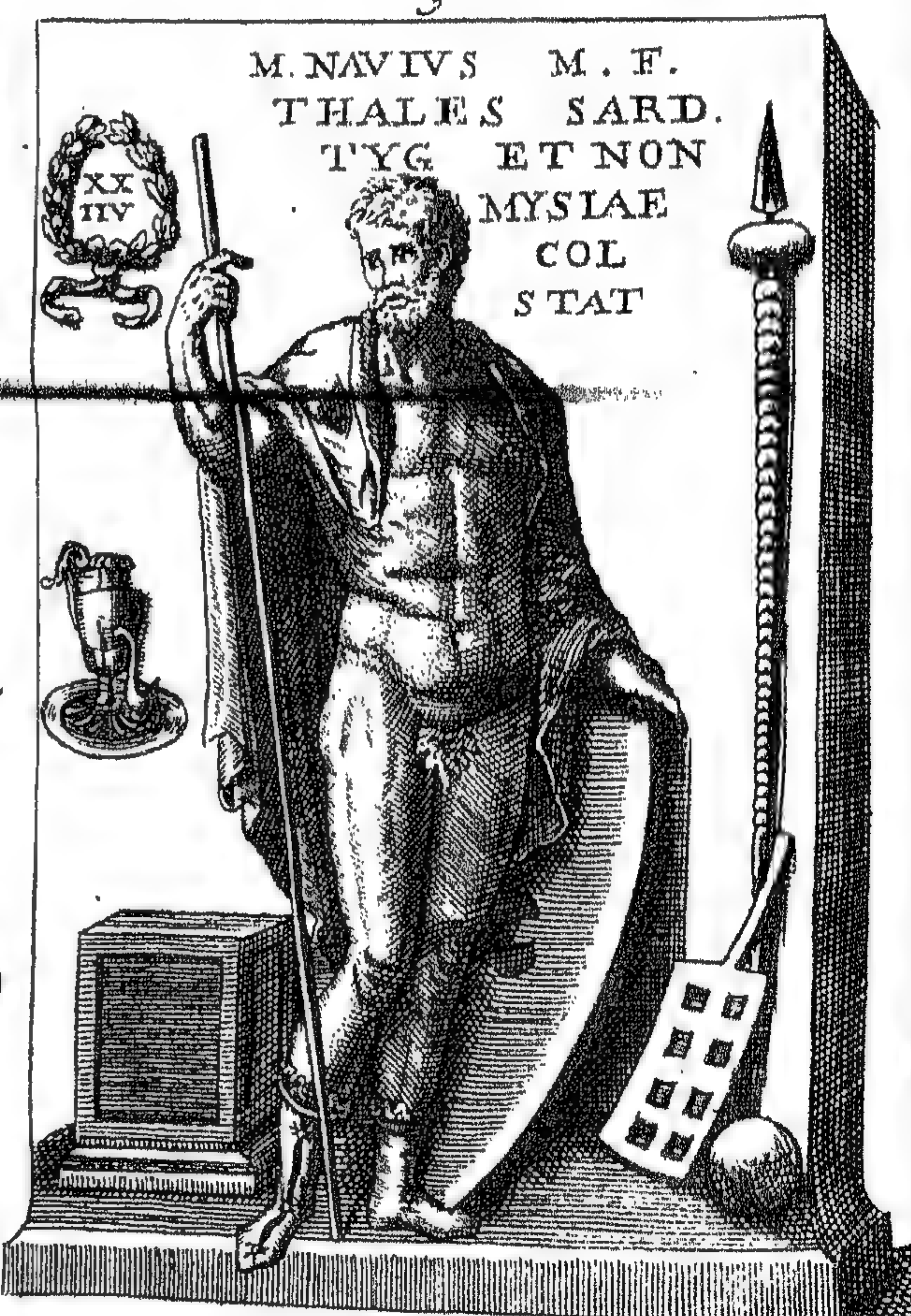
III. We have here another Soldier arm'd like the preceding ones, whose Name is *M. Navius Thales*³: His Spear differs from those that went before, in that the Staff from the Globe downwards seems compos'd of several lesser Globes, that diminish



M DIOCLES MIL COH 7 MAC
MUNICIP ALTIN SEVER
NIC OP FORT D S D



QVINTIO INGENVO VETERANIO
EX COH III PP EX PROVINCIA
GERMANIA INFERIORE FELICI
MARCVS EVOKATVS PRAES ET
CIVES BENEMERECIT



M. NAVIVS M. F.
THALES SARD.
TYG ET NON
MYSLAE
COL
STAT



Voliv

Sepolcri Antichi

Sepolcri Antichi

Sepolcri Antichi

Sepolcri Antichi

Plate 5

diminish by degrees to the bottom, where it terminates in a Cone. His oval Buckler is more than three Foot diameter. Besides this Spear, he has also another pretty long one without a Point, which he holds in his right Hand. Not far from his Head there's a Crown of Laurel, in which is written the Number XXIV, which signifies twenty three, and which perhaps denotes the Number of Years he had been in the Service: Underneath the Crown are a *Præfericulum*, and a *Simpulum*, Vases design'd for the Sacrifice perform'd upon a four-square Altar below. On the other side is an Instrument, which I understand not, and near to that a Globe. Some pephaps may take it for a Racket, and the Globe for a Ball; but for my part I look upon the thing as altogether uncertain.

The following Figure represents a Man arm'd with a Cuirass⁴, and 4 wearing a Crown of Laurel: He has lost an Arm, in which perhaps he held some sort of Weapon: His Cuirass is adorn'd with two *Pegasi*, a Bird, and a Head, which Head is probably *Medusa's*. The other Soldier has a Back-sword⁵ for cutting with, and not a Rapier, contrary to the Custom of both *Romans* and *Spaniards*, who wore small Swords; his Buckler is hollow, and the Dress upon his Legs a sort of Greaves that reach up to the Calf; the Toes are plainly distinguish'd, yet it does not follow from thence that they were naked, because they might possibly be fitted in such a manner as the Fingers are with Gloves.

IV. The two next Soldiers are *Hetruscans*⁶, and were sent me by the late *Maffei*: The Inscriptions upon each are also *Hetruscan*, and not legible. These Soldiers are almost naked from the Hips downwards, unless we suppose them to have strait Breeches and Stockings on, fitted to them in such a manner as that the Shape appears upon the Marble as if they had nothing on, as has been above observ'd in the Cuirasses. They have each of them a Pike of the same Length; but their Swords are very different from one another, and both of a singular Form. 'Tis probable these *Hetruscans* are of early Antiquity.

V. The following *Hetruscans*⁷ are also taken from Monuments of that Country, and have military Habits on like those of the *Greeks* and *Romans*. Their Shields, which are near three Foot in diameter, are for the most part either round or oval, and have Borders like large Basons; except the last Soldier, who has a *Pelta*, with which he covers himself to ward off the Blows against the Enemy that's just going to attack him. Their Swords differ a little from the *Roman* ones. All these *Hetruscans*, who are seven in number, are represented as actually engag'd, some of them attacking, and others defending themselves, so that here is easily seen the way of using their Arms both offensive and defensive.

C H A P. X.

The Military Habits and Arms of the Oriental Nations, according to Herodotus.

WE have hardly any other Knowledge of the military Habit and Arms of the Eastern Nations, but what *Herodotus* teaches us in the seventh Book of his History; where, speaking of the Nations that compos'd the great Army of *Xerxes* King of *Persia*, he has given us this Account thereof. 'The *Persians*, ' says he, wore upon their Heads a sort of Caps, which they call'd *Tiaræ*, and ' which they reckon'd impenetrable; and upon their Bodies a sort of Tunick with ' Sleeves, which serv'd for a Coat of Mail, being cover'd with Plates of Iron that ' resembled the Scales of a Fish. Their Thighs were not undefended, and in-

‘stead of a Shield they carried a Target made of Reeds strongly compacted, which serv’d also to cover their Quiver. Their Javelins were short, their Bows long, their Arrows made of Cane, and their Swords hung down from a Belt on the right side. The *Medes* were arm’d and cloath’d in the same manner; nay indeed this Furniture properly belongs to the *Medes* and not to the *Persians*. The *Cissians* were habited in every thing like *Persians*, except only that instead of *Tiarae* they wore Mitres on their Heads. The *Hyrceanians* were also arm’d after the *Persian* manner, and wore the very same Habit.

‘The *Affyrians* wore Helmets of Brass upon their Heads, but of so barbarous a Form, that they are not easily describ’d. Their Bucklers, Javelins and short Swords were all of the *Egyptian* Fashion; besides which they had a Coat of Mail made of Flax, and a Truncheon of Wood pointed with Iron. With the *Affyrians* are also comprehended the *Chaldeans*. The *Bactrians* had a sort of *Tiarae* or Turbans on their Heads, not unlike those of the *Medes*, and carried Bows made of Cane after the manner of their Country, with a kind of very short Javelin. The *Saces*, who were a People of *Scythia*, wore a sort of Helmet that rose up in a Point like a Pyramid: They had also Breeches, and for Arms carried a sort of Bow, after their own Country Fashion; besides which they had an Ax, and another Weapon call’d *Sagaris*, (which *Xenophon* says was an Ax with two Edges.)

‘The *Indians* wore a sort of Habit made of the Bark of a Tree, carried a Bow, and had Arrows of Cane pointed with Iron. The *Arians* had Bows like those of the *Medes*, but in all other things resembled the *Bactrians*. The *Parthians*, *Chorasmians*, *Sogdians*, *Gandarians* and *Dadicae*, were all habited and arm’d like the *Bactrians*. The *Caspians* wore a kind of Cassock made of Skins, and for their Arms had a Scimeter, and a Bow made of the Cane of their Country. The *Sarange* were dress’d in painted Garments, had Buskins that reach’d up as high as the Knee, and carried Bows and Javelins like those of the *Medes*. The *Pactyans* wore likewise Cassocks made of the Skins of Beasts, and carried a Bow and Ponyard after the manner of their Country. The *Ulians*, *Mycians*, and *Paricanians* were also equipt in the same manner.

‘The *Arabians* wore broad Belts or Girdles, and in the right Hand carried a crooked Bow of great Length. The *Ethiopians* were cover’d with the Skins of Lions and Leopards, and arm’d with Bows four Cubits long, made of Palm-branches, and with Arrows of Cane of proportionable Length, pointed, instead of Iron, with a sharp Stone, of that sort they us’d to cut their Seals. They had also Javelins pointed with Goats Horns sharpen’d like the end of a Lance, and Truncheons arm’d with Iron. When they went to engage in Battle, they painted one half of their Bodies with white Plaster, and the other half with Vermilion. The *Ethiopians* were divided into two sorts, the Eastern and Western; but these differ’d in nothing from one another, save in their Language and in their Hair: For the Oriental *Ethiopians* have long lank Hair; whereas the Hair of the *Libyan Ethiopians* is more curl’d or frizl’d than that of any other People; but of these Notice has been taken already. The Arms and Habit of the *Asiatick Ethiopians* were almost the same with those of the *Indians*: But instead of a Helmet they wore the Skin of a Horse’s Head with the Ears and Mane, and contriv’d in such a manner, as that the Mane serv’d for a Crest, at the same time that the Ears were erect upon the Man’s Head. By way of Shield they made use of the Skins of Cranes.

‘The *Libyans* had Coats made of Leather, and carried a pointed Lance harden’d in the Fire. The *Paphlagonians* wore Helmets compos’d of various Pieces, and had Bucklers and Javelins of a moderate Size, together with Darts
‘and

‘ and a short Sword. On their Feet they wore Shoes after the manner of their
 ‘ Country, that reach’d up to the Mid-leg. The *Ligyans*, the *Matienians*, the
 ‘ *Mariandynians* and *Syrians* were arm’d and cloath’d like the *Paphlagonians*.
 ‘ The *Phrygians* also carried Arms little different from those of the *Paphlago-*
 ‘ *nians*.

‘ The *Armenians*; who were a Colony of the *Phrygians*, were accouter’d in
 ‘ the same manner with them. The *Lydians* were arm’d almost like the *Grecians*;
 ‘ and were formerly known by the Name of *Meonians*, but afterwards took upon
 ‘ them that of *Lydians* from *Lydus* the Son of *Atys*. The *Mysians* had a sort
 ‘ of Helmet peculiar to their Country, with a little Buckler, and pointed Jave-
 ‘ lins harden’d with the Fire.

‘ The *Thracians* carried Foxes on their Heads, were habited in Tunicks
 ‘ tied with many Girdles; and had Buskins on their Legs made of Nerves
 ‘ or Sinews: They were arm’d with Bucklers, Javelins and Ponyards. The *Asi-*
 ‘ *atick Thracians* had small Bucklers made of untann’d Hides, and had each of
 ‘ them two Javelins after the manner of the *Lycians*: They had also Helmets of
 ‘ Brass, with the Ears and Horns of an Ox made of the same Metal, and upon
 ‘ the top of the Helmets a sort of Crest: Their Legs were cover’d with red Cloth.
 ‘ ’Twas among this People that the Oracle of *Mars* was. The *Meonian Cabe-*
 ‘ *lians*, who are also call’d *Lasonians*, had the same Arms and Cloathing with
 ‘ the *Cilicians*, of whom we shall take notice below. The *Mylians* carried short
 ‘ Lances, and were cloath’d in Garments fasten’d with Buckles. Some of them
 ‘ had *Lycian* Bows and a sort of Helmets made of Skins. The *Moschians* had
 ‘ wooden Helmets, little Bucklers, and short Javelins with long Points. The *Ti-*
 ‘ *barenians*, *Macronians* and *Mosynoecians* were arm’d like the *Moschians*. The
 ‘ *Marians* wore a sort of Helmets woven after the manner of the Country, and
 ‘ carried Javelins, with a little Buckler made of Skins.

‘ The *Colchians* wore Helmets of Wood, and Bucklers made of untann’d Hides,
 ‘ and for Weapons had Swords. The *Allarodians* and *Saspirians* were arm’d like
 ‘ the *Colchians*. The People that inhabit the Islands of the Red Sea were cloath’d
 ‘ and arm’d like the *Medes*. The *Phenicians* had Helmets almost of the *Greek*
 ‘ Fashion, Cuirasses of Flax, plain Bucklers, and Javelins.

‘ The *Egyptians* had Helmets divided at the top into two Parts, deep Bucklers,
 ‘ the convex Part of which was very prominent, Lances fit for naval Combats,
 ‘ and great Axes. The *Cyprians* were cloath’d in Tunicks, and arm’d like the
 ‘ *Greeks*. The *Cilicians* had Helmets after their own Country Fashion, little
 ‘ Bucklers of untann’d Hides, and woollen Tunicks: They were each of them
 ‘ arm’d with two Darts, and had Swords like those of the *Egyptians*. The *Pam-*
 ‘ *phylians* were arm’d after the *Greek* manner.

‘ The *Lycians* wore Cuirasses and Boots, had Bows made of the Cornil-tree,
 ‘ Arrows of Cane without Feathers, and Darts: They cover’d their Shoulders
 ‘ with Goat Skins, and upon their Heads wore Caps with Plumes: Their Wea-
 ‘ pons were Swords and Faulchions. The *Dorians*, who were Natives of *Pelopon-*
 ‘ *nesus*, were arm’d after the manner of the *Greeks*. The *Carians* were arm’d
 ‘ much after the same manner, saving that they had short Swords and Faulchions.
 ‘ The *Ionians*, *Eolians* and *Hellepontians* were *Greeks*, and arm’d after the Fa-
 ‘ shion of that Country.

CHAP. XI.

- I. *A singular Armour of Masistius, Lieutenant-General of the Persian Army under Mardonius.* II. *In what Herodotus differs from some later Authors, concerning the Habit of the Eastern Nations.* III. *The Habit and Arms of the Arabian Scenitæ, or of the Saracens, according to St. Jerome.* IV. *The Military Habit and Arms of the Amazons, represented, with some Varieties.*

I. **W**E have now seen what sort of Armour the Eastern People that were in *Xerxes's* Army made use of, according to *Herodotus*, who liv'd in those Times. The same Author describes in another Place the Military Habit of *Masistius*, a *Persian* Prince, who under *Mardonius* had the second Post in the *Persian* Army. He wore, our Author tells us, a Cuirass made of Gold Scales, and above that a red Tunick. This Cuirass being impenetrable and proof against the *Athenians* who attack'd him, one of them perceiving it, resolv'd to give him a Stroke in the Eye, which accordingly he did, and kill'd him. The *Persians*, *Strabo* says, were arm'd with *Gerræ*, a sort of Buckler in Form of a *Rhombus*: Besides the Bow, they had also a sort of Arms call'd *Sagares* like Battle-axes, and short Swords: their *Tiara* rose up in form of a Tower, and their Cuirass was scal'd like a Fish; all which agrees very well with what *Herodotus* says.

II. The *Indians*, *Strabo* tells us, were arm'd with a Bow and Arrows of three Cubits long, together with Javelins, *Peltæ*, and long Swords that were also full three Cubits. They made use of a Collar instead of a Bridle.

There seems to be a considerable Difference between what *Herodotus* relates of the *Egyptian* Army, and *Xenophon's* Relation. The last says they us'd a sort of Bucklers that reach'd down to their Feet, very long Spears and short Swords: But whether this Buckler agrees with what *Herodotus* says of it, I know not. *Xenophon* also in another Place speaking of the length of their Bucklers, repeats the same thing, and adds that these long Bucklers were made of Wood. We shall hereafter exhibit a naked Man arm'd with one of these Bucklers, which covers him from the Shoulders to the Feet.

Herodotus says above, that the *Thracians* carried Foxes upon their Heads: But *Xenophon* says, that they were the Skins of Foxes, which they made use of in very cold Weather to cover the Face, when they march'd through Frost and Snow.

What *Strabo* says of the *Ethiopians* differs not much from what *Herodotus* relates: The *Megabarian Ethiopians*, says he, carry Clubs or Truncheons arm'd with Iron; they have also Lances, and Bucklers made of untann'd Hides. The other *Ethiopians* make use of the Bow and Lance.

III. The *Scenitæ* of *Arabia*, who, according to *Ammianus Marcellinus*, were call'd *Saracens*, wore their Hair tied with Ribbands, as *S. Jerom* says in the Life of *Malchus*, went half naked, and were arm'd with Bows and Lances of a great Length.

PLATE VI. IV. The *Amazons* very frequently occur in ancient Monuments, some of which we therefore here exhibit. The first is only a *Busto*¹, and represents her with her Hair tied with a Ribband: her Ax has but one Edge, which is contrary to the Custom of the *Amazons*, who generally made use of two edg'd-ones: her Buckler is what *Virgil* calls the *Pelta*.

Ducit Amazonidum lunatis agmina peltis.

The



La Chausse



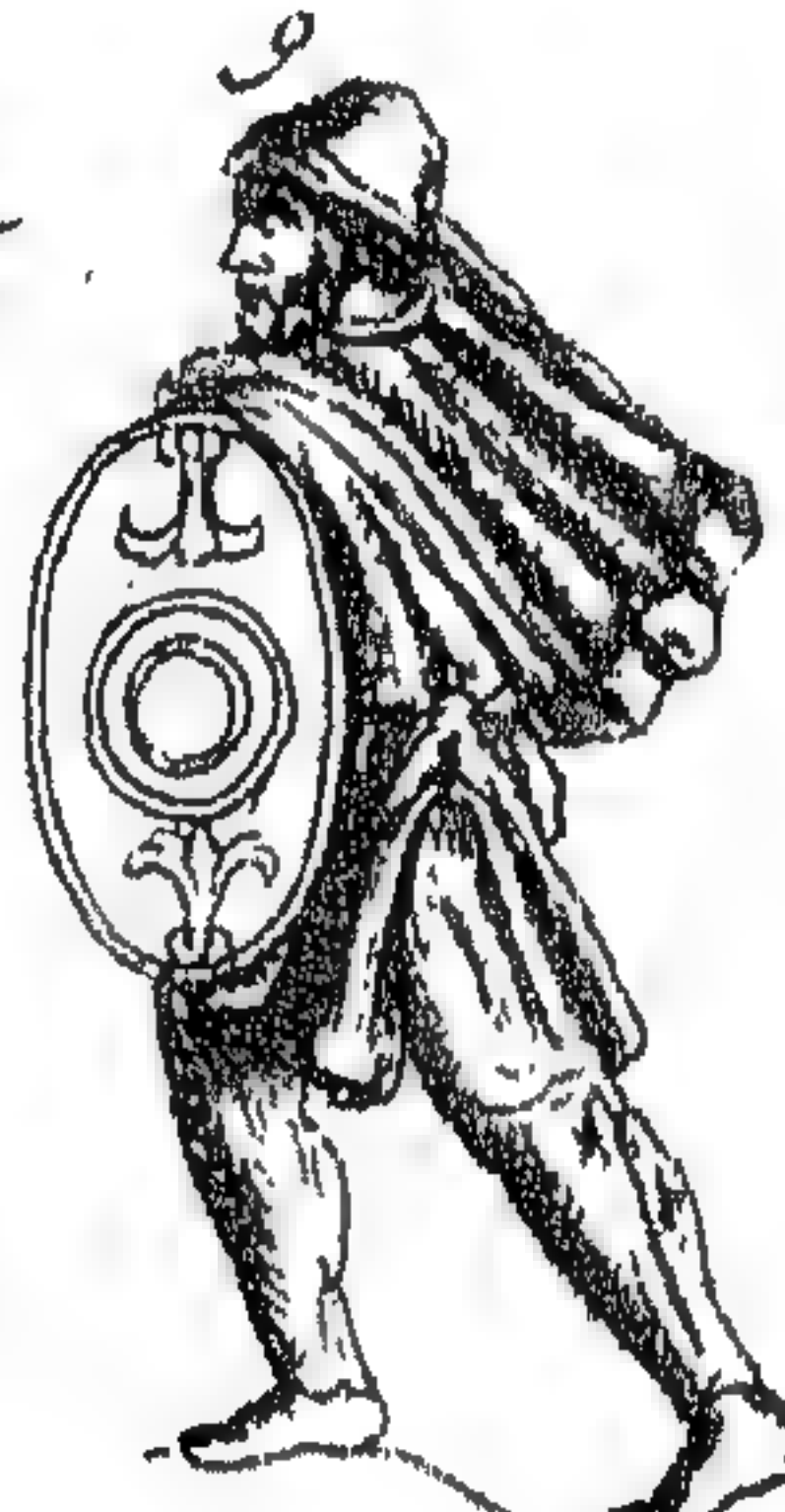
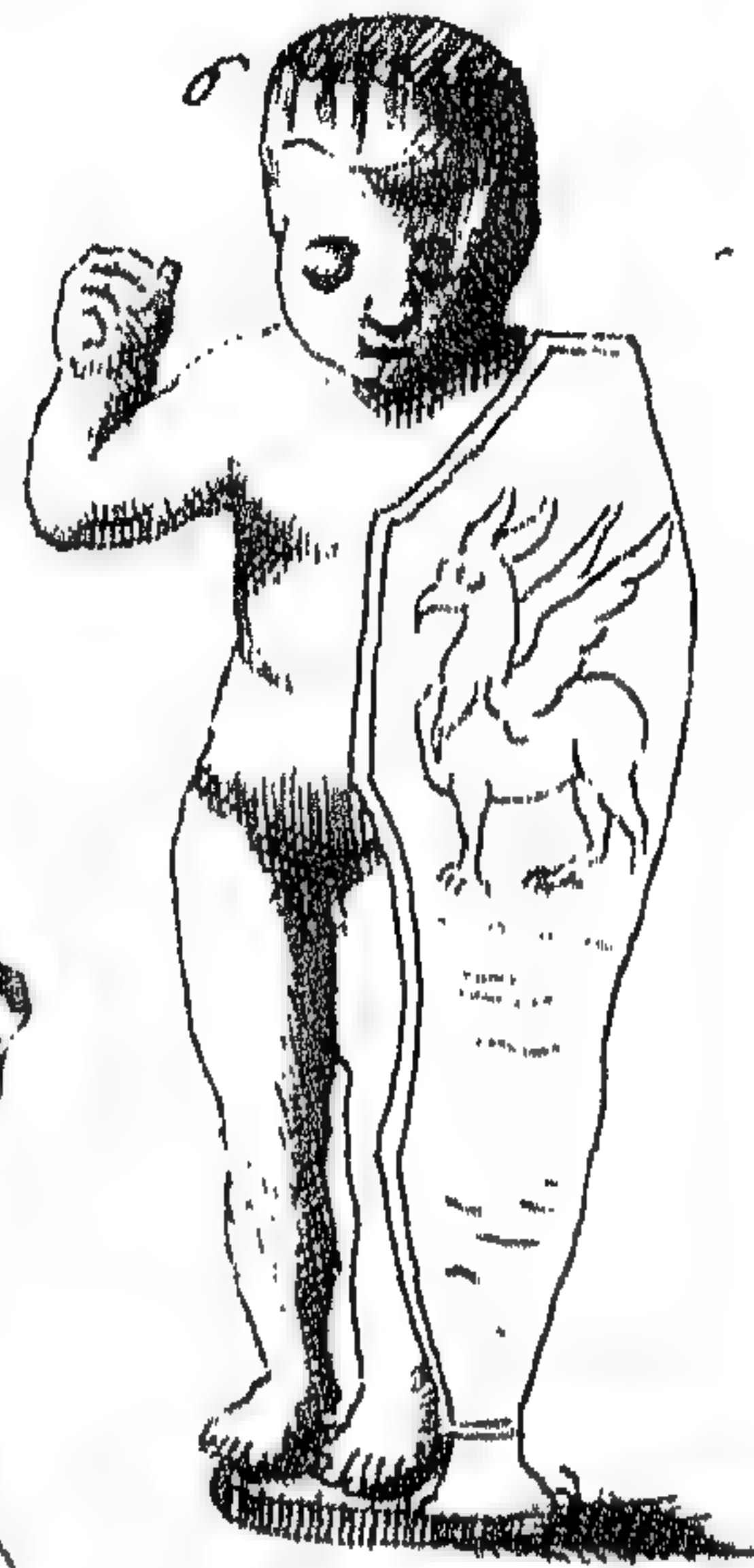
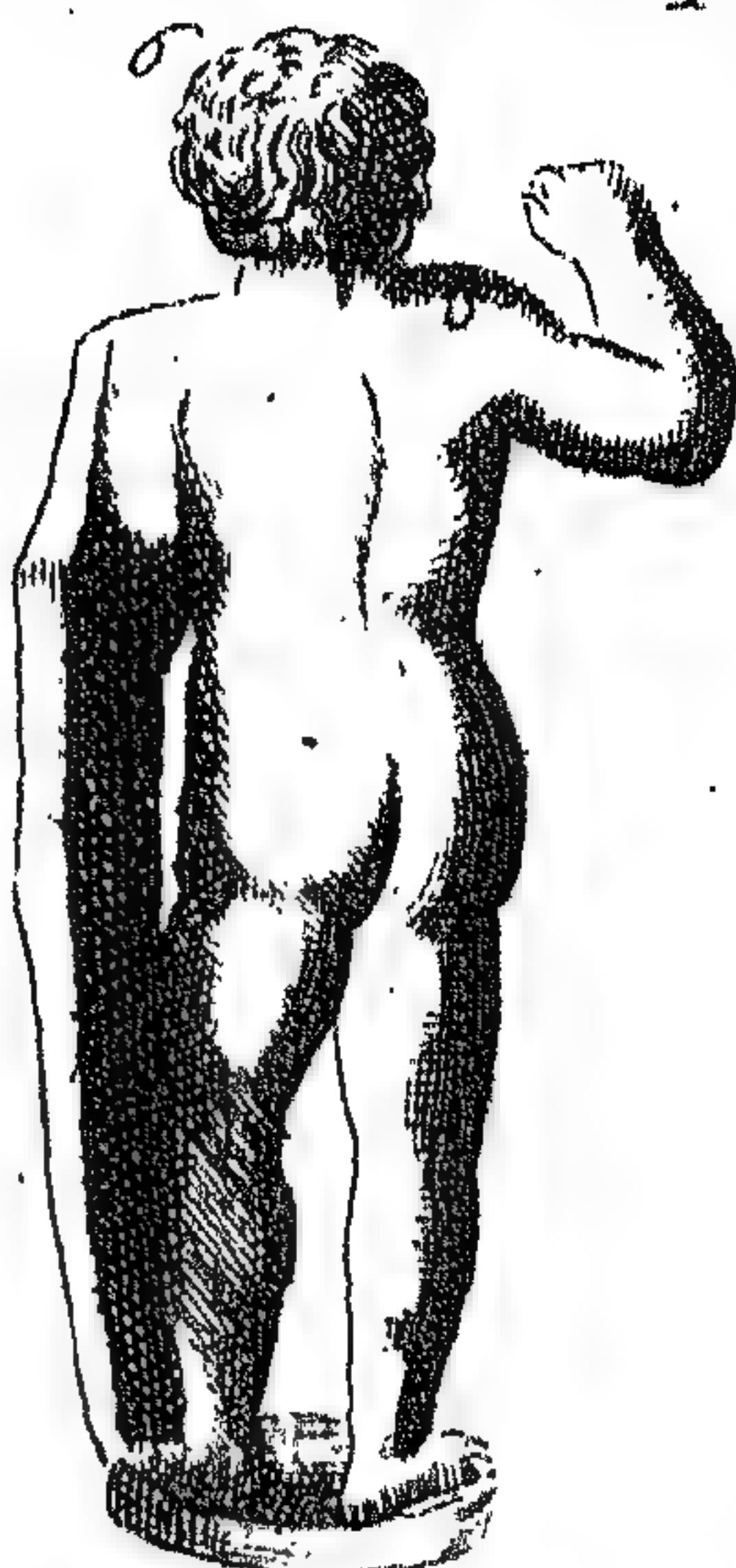
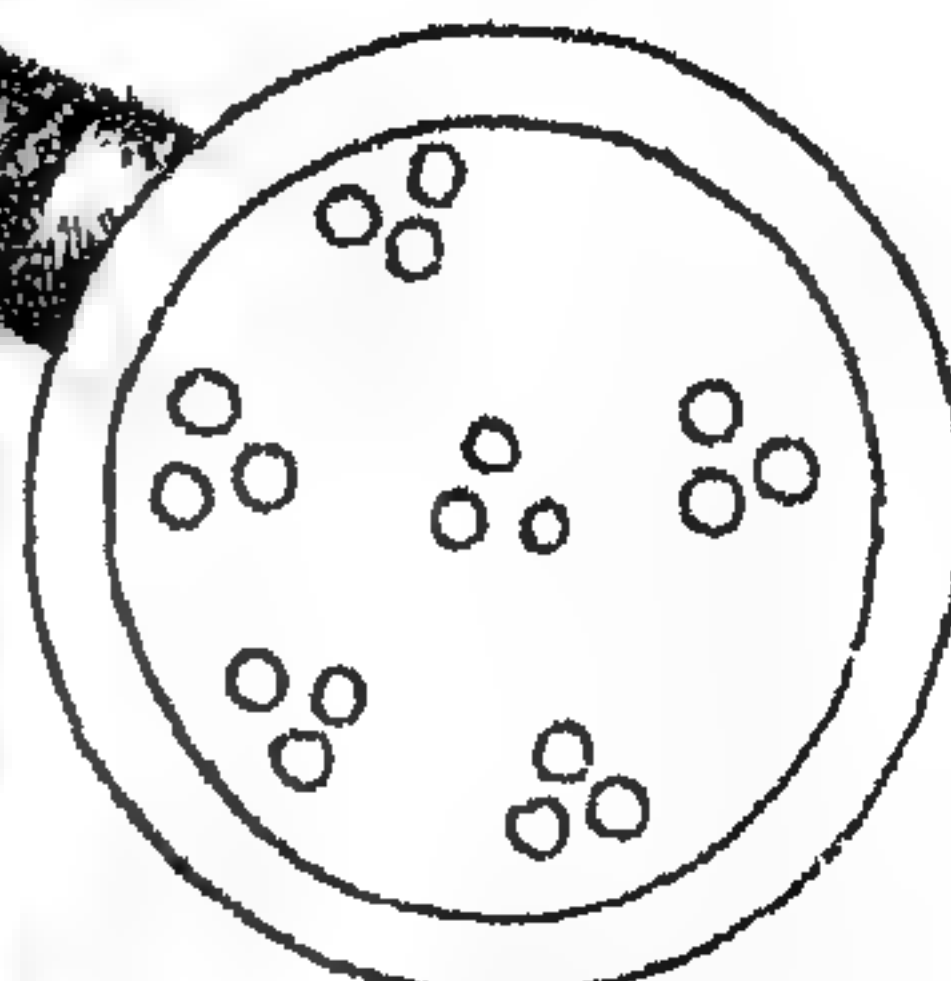
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Trajane Pillar

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Trajane Pillar



Trajane Pillar



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The Statue of the following *Amazon*² represents her habited in a Tunick which² does but half cover her: She holds a Bow in her Hand, and by her Side has a Quiver full of Arrows: At her Feet is a Helmet, and behind her an Ax with two Edges, and her *Pelta*. The following *Busto*³ taken from a Gem, represents an *A-*³ *mazon* with a two edg'd Ax upon her Shoulder. The next Figure, taken from the *Justinian* Gallery, seems to be an *Amazonian* Captain⁴, giving the Word of⁴ Command with her Truncheon or Scepter extended: She has also the *Pelta* after the Manner of the *Amazons*.

C H A P. XII.

I. Some singular Figures of Soldiers. II. An Ethiopian armed; an Armenian taken from a Medal. III. The Military Habit of the Parthians very like that of the Daci. IV. Other Soldiers and Germans differently cloathed and armed, some of which fight with a Club. V. The Auxiliary Troops of the Romans, the Slingers, Sarmatians, and others. VI. Women in Armour on Trajan's Pillar, according to Fabreti. VII. Germans cloathed and armed in different manners. A Scythian. VIII. Two Spanish Soldiers.

THE following Figure of a Soldier⁵ in this Plate, which I brought from⁵ Rome, is undoubtedly Antique, and his Armour not much unlike that of the *Egyptians*, describ'd by *Herodotus*. His Helmet, which rises up in the form of a Cone, is split at the top: his Buckler is round and hollow: his Cuirass seems to have been made of Thread interwoven, such as, according to *Herodotus*, was that of *Amasis* King of *Egypt*: then for his Legs, the Furniture of them reaches above the Knee: in his Hand he held a Lance, but it is fallen through the injury of Time. The naked Man⁶ that follows has a Buckler of a very irregular⁶ Figure; but which agrees well enough with that of the *Egyptians*, as describ'd by *Xenophon* in five several Places of his Works, as we shall see below. This Buckler, he says, was of Wood, and large enough to cover a Man from the Shoulders to the Feet.

II. The *Ethiopian*⁷ that marches with his half Pike, taken from *Cosmas* an *E-*⁷ *gyptian* Monk, was of that Part of *Ethiopia*, now call'd *Abyssinia*. The Habit of the *Armenians* in the time of the *Roman* Emperors, differs pretty much from that describ'd by *Herodotus*, as appears by the Medal of those Emperors, from whence it is here exhibited⁸.

III. The Military Habit of the *Parthians* is seen entire in the Arch of *Septimius Severus*; where many of the Figures are bare headed, while others wear the *Tiara*, bending forward from behind like the *Phrygian* Bonnet. The Habit is a Tunick which falls down to the Knees, and girt about the Middle, above which is a *Chlamys*, or kind of short Cloak upon the Shoulders: this is what they call'd the *Candys*, which in all the Representations of it appears floating at the pleasure of the Winds. Their Breeches are wide, and fasten'd about their Ankles, and their Shoes round and close. This sort of Dress for the Legs is almost common to all the barbarous Nations, both Eastern and Western; for which reason it probably is, that upon all the *Roman* Trophies, the Captives that appear are thus accouter'd. The *Parthian* Habit is exactly like that of the *Dacians*, without almost any Difference; and is common also to many other Nations of the Ger-

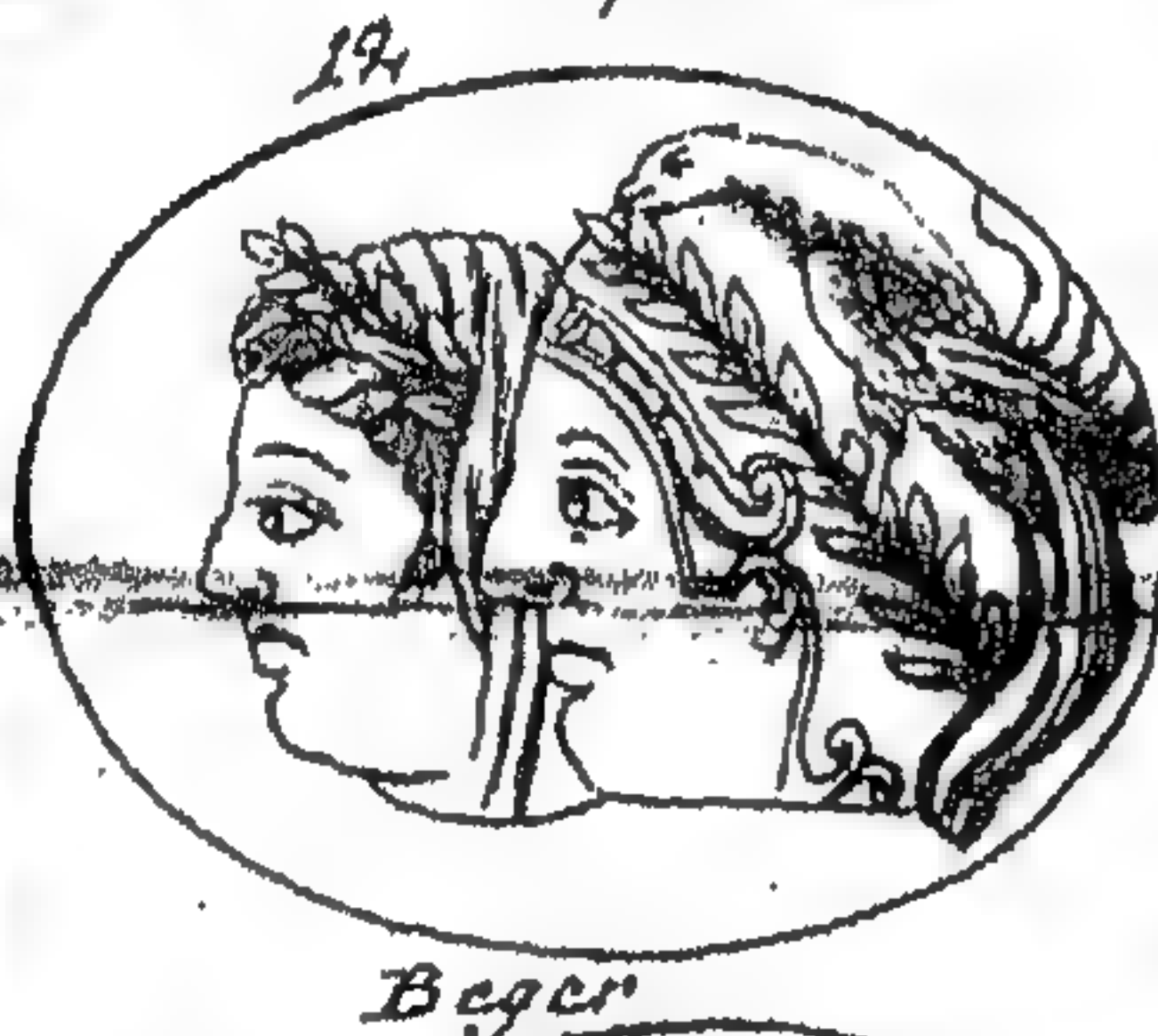
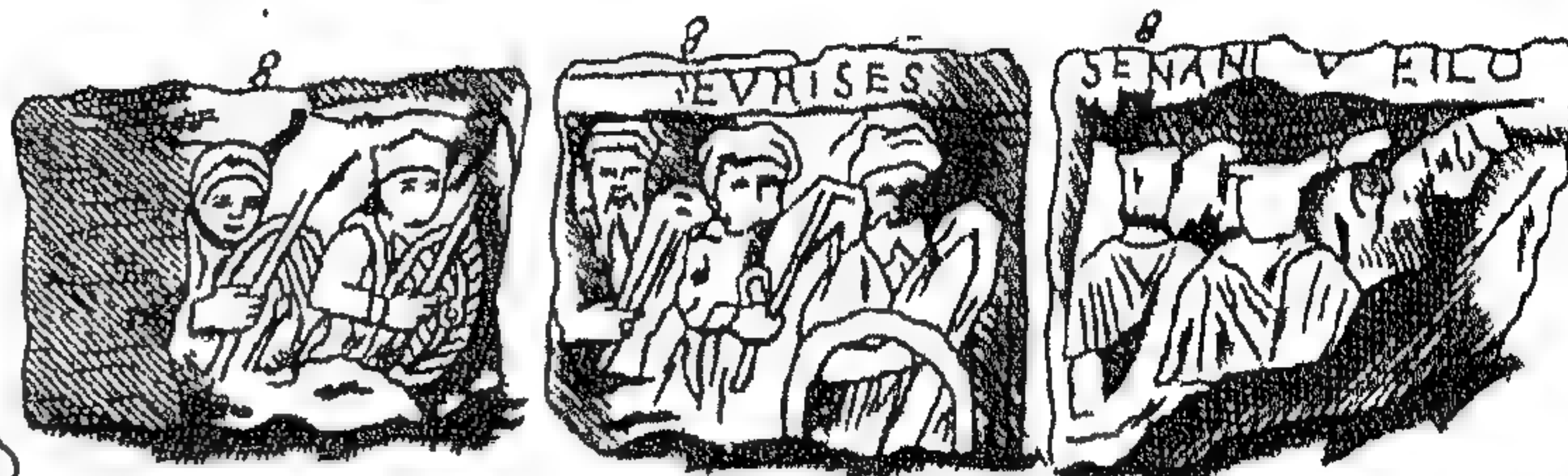
mans. The *Dacian* Tunicks reach down to the Knee, and are girt about the Middle: they seem also to wear Breeches, as the *Parthians* did, which the *Greeks* call'd *Anaxarydes*. Their Stockings are fasten'd to the Breeches, and open at the Bottom, after the manner of the *Barbarians*. Their Cloaks or *Chlamydes* are short, and for the most part fring'd. Their Shields are oval, and two Foot and a half, or three Foot in Diameter, if taken the long way, as appears from comparing them with the Stature of the Men. Their offensive Arms were the Sword, which exceeded in length the *Roman* Sword, and was almost as crooked as a Sickle: many of 'em had also Bows and Arrows, and some besides the ordinary Sword had a Ponyard; all which is observable in *Trajan's* Column, where the Wars of that Emperor with the *Dacians* are represented. The next Soldier in the Plate⁹ is not unlike this; and his short Cloak resembles the *Parthian* *Candys*, and is fring'd at the Bottom.

IV. Not far from him is another Soldier¹⁰, who is likewise found upon the *Trajan* Column, and who has also an oval Buckler, and a Sword made after the *Dacian* manner: his Head and Legs are bare, and his Shoes as simple and plain as may be, and of that sort call'd the *Solea*, which cover'd little more than the sole of the Foot. His Habit is nothing but a Tunick, and that girt about the Waste; so that upon the whole he seems probably of some neighbouring Nation to the *Dacians*. The Soldier with the great oval Buckler, who fights with a Club¹¹, is of some Nation of *Germany*. For we find many accouter'd in the same manner upon the Column of *Antoninus*, where the War of the *Romans* with the *Marcomanni* and *Quadi*, People of *Germany*, is represented. This Soldier is naked from the Waste upward, but wears Breeches like the *Dacians*, which come down to the Ankles, so that they serve at the same time for Stockings. 'Tis observable in the same Column of *Antoninus*, that the *German* Nations were very differently arm'd and habited from one another, for some of them, as has been observ'd, were equipt like the *Dacians*, without almost any difference; of which kind is the Soldier¹² exhibited next to him that's arm'd with a Club; and the three Archers¹³ underneath.

V. Among the Auxiliary Troops, both of the *Romans* and *Dacians*, we find some Soldiers of neighbouring Nations accouter'd in an extraordinary Manner. A Slinger, with an oval Buckler, is habited in a Tunick girt about the Waste, and a *Pallium* above it, in the Skirt of which he carries Stones for his Sling: he wears on his right Side a short Sword or Dagger, and has his Legs and Feet naked. Behind this Slinger is another Soldier that throws Stones with his Hand; and behind these four or five others who seem to be *Sarmatians*: these wear a Bonnet not unlike the *Pileus*, and Cuirasses scal'd like Fish, of which more amply when we come to treat of the Cavalry. Another whose Weapon is fallen out of his Hand, and who carries an oval Buckler, wears a Bonnet flat at the top¹⁴; of which sort we find several in other Parts of the *Trajan* Column.

We have already seen a *German* Soldier naked to the Waste, fighting with a Club, and defended with an oval Buckler. We have here another of 'em¹⁵, but his Club is fallen: he wears a short Sword not unlike the *Roman* one, and a sort of Breeches that serve at the same time for Stockings, but open at the Ankles.

VI. The most singular Habit of all, is that of certain Archers¹⁶, arm'd with a Helmet, and a kind of Cuirass, under which is a long Robe that reaches down to their Heels; so that one wou'd almost take them for Women. On their right Side they have a Quiver and a Sword. *M. Fabreti* is of Opinion, that these were really Women, that went to the War as well as the Men. The Engraver indeed has given some of them a Beard; but *Fabreti* assures us, that there's none upon the Marble, but that he who drew the Design was led into the Mistake through some



some Inequalities on the Chin, occasion'd by the Decay and Mouldering of the Stone, which he took for a Beard. If these are Female Warriours, they were of some Nation that border'd upon the *Dacians*.

VII. The following Plate exhibits at first Sight certain *Germans* fighting, taken from the Column of *Antoninus*: the first is an Archer,¹ and wears a Bonnet like that of the *Parthians* and *Dacians*. The second², who wears a Cloak upon his naked Shoulders, throws Stones out of a Sling. The third³ who guards himself with his Buckler, had probably a Spear in his other Hand, now fallen thro' the Injury of Time. Another, who has a flat Bonnet on⁴, is also throwing Stones out of a Sling: these Slingers wore Cloaks, which serv'd not only to carry their Stones in, but in some measure also to ward off those thrown by the Enemy. Another *German*⁵, arm'd with a Buckler, has his Sword in a Posture of giving a great Stroke. The following one⁶ is taken from the *Theodosian* Column at *Constantinople*: the Man is a *Scythian*, or of some neighbouring Nation, and led in Triumph by *Theodosius*.

VIII. The two next are *Spaniards*⁷, taken from *Scipio's* Buckler, which shall be exhibited below: their Swords are exactly like that of the *Romans*; or rather the *Romans* wore Swords in Imitation of the *Spaniards*, as several Authors testify. Their Habit very much resembles that of the *Mauri*, as we shall see below in the Cavalry.

C H A P. XIII.

I. We meet with few Gauls armed in ancient Monuments; some armed Gauls discovered lately. II. Strabo speaks of the Gauls Arms, and particularly of the *Materis* or *Mataras*. III. A Gaulish Archer, the Greek Inscription of which suspicious. IV. A Man fighting with throwing Stones. V. The Helmets of the Gauls, according to Diodorus. VI. The Arms of the *Spaniards*. VII. The Arms of the *Lusitanians*.

I. THERE are very few Monuments where arm'd Gauls are exhibited; because that Nation, after it was subdued by *Julius Caesar*, made War under *Roman* Banners, and probably were accouter'd as the *Romans* were. We meet indeed with some Gauls in their own Country Habit at a certain prophane Solemnity, express'd upon a Bass-Relief dug up in the Cathedral Church of *Notre Dame*. * Upon two Faces of the Stone there are six Men armed, three upon each Face; on one of which Faces there are Men full grown, but on the other they are three beardless young Men. They wear a Bonnet not unlike that of the *Dacians* and *Germans*; but forasmuch as the Figures are represented in a front View one cannot well discern whether it bends forward from behind as that of the *Dacians* does. They have each of them a Spear and Buckler; the last of which is of a *Hexagon* Figure in the Hands of the grown Men, and *Oval* in those of the young Gauls. But as these Figures, which are no more than *Bustos* from the Waste upward, are so close to each other that the Bucklers cover them, and the Bass-Relief it self is in no good Condition, so it's not easy to discover the Form of the Habit.

II. *Strabo* says, that the People of *Belgick Gaul* surpass'd all the other Gauls in Strength and Valour; and that amongst the *Belgæ*, the *Bellovac*i and *Suessones* were

were the bravest of all the rest. These let their Hair grow, wore Breeches, and were habited in a sort of open Garment with Sleeves instead of the Tunick, which fell down below the Hips. Their Swords were of great Length, in proportion to their own Stature, and worn upon their right side; their Bucklers were also long, and their Lances in proportion; they likewise us'd a sort of Spear call'd *Materis*, or *Mataris*, as *Cæsar* has it. The Author to *Herennius* calls it also *Materis* in this Passage: *If any one, speaking of the Macedonians, should say that the Sarissæ did not so soon make themselves Masters of Greece; or of the Gauls, that the Materis was not so easily driven out of Italy:* Which shews that this Weapon was anciently of ordinary Use among the *Gauls*: But this is farther confirm'd from a Passage cited by the Grammarians out of *Sisenna*: *Gallia materibus*, says he, & *Suevi lanceis configunt*. But it was call'd indifferently *Materis*, *Mataris* and *Matarata*; and by *Agobard*, *Matarus*, in his Book *contra Judicium Dei*, cap. 6. where he thus expresses himself: *Contra quem exerto brachio gladium vibrans, aut matarum tenens stas paratus ad cedendum*. *Goudouli* also in these later times, a Poet of *Thoulouse*, makes use of the Word *Matras* to signify a Weapon.

*D'un grand cop de Matras
Mourie le jour de son trepas.*

But the Word *Matras* is us'd at this Day through one half of *France*, to signify a Javelin or Arrow. *Strabo* adds that some of the *Gauls* made use of the Bow and Sling. They had also a Weapon made of Wood, not unlike the *Roman Pilum*, which they darted, and made use of particularly in hunting.

- 9 III. We have here a *Gaulish Archer* taken from a Bass-Relief, in the Possession of *M. du May*, Counsellor at *Dijon*: He is bare-headed, has a Quiver upon his Shoulder, and in his right Hand a large Bow. His Habit is a long Tunick with Sleeves, which by reason of its being girt about the Waist, reaches not below the Knee. His Stockings, which are probably of a Piece with his Breeches, are something like those of the *Dacians*. I formerly produc'd the *Greek* Inscription that's about the Figure, thinking it to be genuine; the Terms of which are thus read: O ATPEAIANOC CEBACTOC, and on the opposite side ΤΩ ΜΙΤΡΑ ΤΕΝΕΤΗ, and at the bottom ΤΩ ΤΕΡΕΝΤΙΩ ΤΗΕΡΕΤΗ. In *English* thus, Aurelian Augustus, to Father Mitras, to the Servant Terence: All which, besides that it has no manner of relation to the Archer, is almost unintelligible: For where's the Sense of Aurelian to Father Mitras, and to the Servant Terence? And what has the God *Mitras*, or his Servant *Terence*, to do with this Archer? But besides all this, the Inscription, as short as it is, shews a great deal of Ignorance, which tastes very strong of that of later Ages. Some of the Ancients indeed were ignorant enough of *Greek*, as well as the Moderns, and made Mistakes in Orthography; but then they never blunder'd in this manner, writing *Αὐρηλιανός* with an *ε* instead of an *η*; or *Μίτρας* with a *τ* instead of a *θ*. Nor were they so ignorant as to confound the *ε* and *η*, and put one for the other, as in this Word here *ὑπερέτῃ*, where in the second Syllable it ought to be an *η*; to say nothing of the supernumerary *ε* at the end of the Word. The *Pseudo-Chyndonax*, with which so many were deceiv'd, came also from *Dijon*; let us therefore take care not to be impos'd upon by the *Pseudo-Terence*. A very learned Man of that Country is of Opinion with me that this Inscription is spurious; tho' as to the Figure dug up there, it's very probably what it pretends to be. But forasmuch as I have never seen the Original, so I dare not venture to assert that the augural Staff and Bonnet represented on one side, and the Serpent on the other, are of the same Antiquity with the Archer himself; or whether they have not rather been added in later times when the Inscription was forg'd.

IV. I know not whether I ought to reckon among the military Order this Man half naked¹⁰, with a large Stone in his right Hand, heav'd up in a Posture for throwing it. The Original is a brazen Statue of a Foot high, found in the Village of *Ogne* near *Treschateau*; and taken notice of by *S. Julian*, in his History of *Burgundy*. It was once in the Cabinet of *M. Tabourot*, and afterwards in that of *M. Parisot*, Procurator General to the Parliament of *Dijon*. We have seen above one of the military Order throwing Stones out of his Hand.

V. The *Gauls*, according to *Diodorus*, made use of Helmets, upon which they hung certain large Ornaments, by way of Shew and Pomp. The same Author says they adorn'd their Helmets with Figures of Animals, and sometimes with an Ox's Ears and Horns, together with the Mane which serv'd for a Crest, and which was the manner of the *Thracians*, as we have already observ'd.

VI. Most of the *Spaniards*, *Strabo* says, made use of that sort of Bucklers call'd *Peltæ*, and of light Arms, the better to carry on their Robberies and Plunders, as the *Lusitanians* did in particular, which Arms were the Javelin, Sling and Sword.

VII. The *Lusitanians*, *Strabo* adds, were skill'd in Ambuscades, were light, swift, and vigilant, seldom staying long in a place. Their Bucklers were small, not exceeding two Foot in diameter; hollow within, and convex on the outside: They had neither Handle nor Buckle fix'd to them; nor any thing else but a Throng to put the Arm through. They made use of linnen *Thoraces*, few wearing Coats of Mail, and of Helmets with three Crests. Some of them also had Helmets made of Nerves and Sinews. The Foot wore Boots, and carried each of them several Javelins; some also using Lances plated and pointed with Brass. At the Battle of *Cannæ*, *Livy* says, the *Gauls* and *Spaniards* had Bucklers almost of the same Form; but Swords very different; those of the *Gauls* being very long, and without Point, but those of the *Spaniards* pointed, they being more used to thrust after the manner of what we call fighting with the small Sword, than cutting as we do with the Backsword.

B O O K II.

Of their Armour, and every particular Part of it described.

C H A P. I.

I. *The Helmets, and their various Names, among the Greeks, as well as the Romans.* II. *The Ornaments of the Helmets; their Vizors and Crests.* III. *Images of several Helmets.*

I. **T**HE *Greeks* call'd the Helmet *καλύπτρις* or *καλύπτρον*, and the *Romans* nam'd it *Cassis* or *Galea*; tho' these of old were two sorts of Helmets, for what they call'd *Cassis* was originally of Metal, but the *Galea* of Leather. We have already seen many Eastern Nations with Helmets of the last sort, and others with wooden ones. The *Galea* and *Cassis* nevertheless, which in some

Authors are distinguish'd from one another, are indifferently us'd to signify the same thing.

II. To the Helmets worn by Men of Distinction, they added often the Figures of Animals, as Lions, Leopards, and Griffins; but for the most part the whole Helmet represented a human Head, and was commonly made of Iron or Brass. The *Carians*, *Herodotus* says, who were a very ingenious People, first invented the Crests, which ever after were worn upon the Helmets. Some of the Helmets, especially those of the *Greeks*, were so contriv'd as to cover the Face; tho' I have not yet met with any ancient ones with the Vizor to pull down over the Face, after the manner of those of later Ages: But for all this, it is thought these moving Vizors were of ancient Use. The Helmets of most Esteem among the *Greeks* were those of *Bœotia*, as *Xenophon* informs us. The *Romans*, as well as the *Greeks*, had also their Helmets with Vizors; besides which, they clapt upon them certain Skins of Beasts, which cover'd the whole Helmet, and fell down upon their Shoulders. With this kind of Coverings we have already seen the Helmets of Ensigns, and *Primipili*, or those that made the first Rank in the Legions. The Soldiers made use of their Helmets for many Purposes, especially for drawing Lots out of upon occasion. The Crests were of various Forms; sometimes representing one sort of Animal, and sometimes another, as a Lion, for Example, a Fox, a Griffin, and sometimes a Mane or *Juba*, as it was call'd by the *Latins*, tho' the Word properly signifies a Crest resembling the Mane of a Horse, which is call'd *Juba Equi*. Helmets had also sometimes three Crests in them, such as was that of *Turnus* in *Virgil*.

*Cui triplici crinita Juba galea alta chimeram
Sustinet, ætneos efflantem faucibus ignes.*

III. ~~The Helmet of Alexander the Great is seen in a beautiful Gem~~ of the Prince *Don Livio Odescalchi*, where the Heads of that mighty Monarch and of his Mother *Olympias* are represented, and from thence here exhibited at large ¹¹. Upon *Alexander's Thorax* there is seen the Head of *Medusa*, with Serpents issuing out of it, besides which there are other Serpents scatter'd here and there upon the Cuirass. *Alexander's* Helmet upon a Gem in the Cabinet of *Brandeburgh*, ¹² is something different from this in respect of Ornament ¹²: For besides a Laurel-branch there is seen in Relievo a Bird couchant, with its Wings extended, and its Tail falling down to his Shoulders. We find another Helmet of *Alexander* upon ¹³ a Medal ¹³, adorn'd with Figures, among which is a *Centaur* fighting with a Man: It has also the triple Crest, taken notice of by *Virgil*; tho' there appear only two, by reason of one side of the Helmet's being only exhibited, the third being without all doubt on the other side. There are two other Helmets in this ¹⁴ Plate of a very singular Form ¹⁴, which are left to the Reader to observe: The last ¹⁵ of them ¹⁵ has for a Crest a Griffin of an enormous Size. To these we here add ¹⁶ two more ¹⁶ of an uncommon Form, taken from two Medals of the Abbot *de Fontenay*. And now we shall content our selves with what we have exhibited of this kind, without repeating in this place the great number of those found in this and the other Volumes: Among which some very extraordinary ones are to be seen among the Busto's and Heads of *Minerva* in the first Volume; among the Figures of the Goddess *Rome*; at the *Narbonnensian* Sacrifice of a Hog, Vol. 2. at a Sacrifice to *Bacchus*; and in many other places of this Work.

In the many Battles represented hereafter, we shall meet with a great number of *Roman* Helmers, in which we shall find but little difference; except in that remarkable Change made in them at the *Parthian* Expedition under *Septimius Severus*, where we find them bending forward from behind, after the manner of the *Parthian Tiara*.

C H A P. II.

- I. The Coats of Mail; their various Shapes, and the Matter they were made of.
 II. A Coat of Mail made by Order of Amasis King of Egypt. III. An extraordinary Coat of Mail dug up at Antium. IV. Coats of Mail with Scales, others with Hooks. V. What the Paludamentum was.

I. **T**HE Coat of Mail was by both *Greeks* and *Romans* call'd *Thorax*; but by the last more commonly *Lorica*, a Word deriv'd from *Lorum* signifying a leathern Thong or Piece of Hide, of which they anciently made the Coat of Mail: From hence also it is the *French* gave it the Name of *Cuirass*, the Word *Cuir* in their Language signifying a Piece of Hide or Leather, of which Matter this Piece of Armour was made even in the later Ages. Part of the *Cuirass* or Coat of Mail of the *Roman* Legions consisted of Thongs with which they were girt from the Waist to the Armpits. In After-times they made them of Leather cover'd with Plates of Iron dispos'd like Scales; of which sort we meet with many in antique Monuments. Another way of making them was with Iron Rings let one into another, and chain'd and interlac'd together, which sort of *Cuirass* the *Greeks* call'd *αλυσιδωρίς*, the *French*, *Cotte de Mailles*, and the *Latins*, *Lorica hamis conferta*, or *hamata*. It was also made of Brass or Iron in two Pieces, which they fasten'd to one another with Buckles, as they do at this Day; and this they either wore under a *Chlamys*, or cover'd with the *Sagum*. Some also were made of small Chains, and covered with Iron Plates: And many Nations, as we find, made them of Linnen or Woollen, folded together several times, the better to resist a Blow, or at least to weaken the Force of it. Of this sort, *Xenophon* says, the *Chalybes* had *Cuirasses*, which came down as low as the *Abdomen*, and were bound about besides with strong Cords.

II. The Coat of Mail made a Present of to the *Lacedemonians* by *Amasis*, and which was seiz'd by the *Samians* before its Arrival at *Lacedemon*, was made of Linnen, and was a curious Piece of Workmanship: For it was adorn'd with the Figures of various Animals, embroider'd with Gold, and with a certain sort of Thread gather'd from certain Trees. But what was most to be admir'd in this *Cuirass* was, that tho' the largest Threads in it were very small and fine, yet there were three hundred and sixty more still smaller and finer, which nevertheless might be very plainly distinguish'd. This *Amasis* made also such another Present to *Minerva* of *Lindos*. The *Romans* likewise made their *Cuirasses* of Linnen consisting of various Folds; of which sort was that worn by *Galba*, which *Suetonius* calls *Lorica lintea*, and which that Emperor thought but a weak Defence against so many Swords, or Conspirators who were contriving his Death.

III. The Form of the *Cuirasses* was much the same both among the *Greeks* and *Romans*, as we have already observ'd, and may yet observe hereafter. We here present the Reader with two very singular ones: The first of which ¹⁷ was lately dug up at *Nettuno*, which is the same with the ancient *Antium*; than which I know not whether there was ever seen one with more Ornaments. The Head of *Medusa*, which is at the top of it, has neither Serpents nor dishevell'd Hair; but on the contrary the Hair is platted and tied under the Chin. A little below this Head is the Head of the Sun under a Ribband tied of a Knot and flowing. The Head of the Moon was without doubt over against it; but is cover'd with one end of the *Chlamys* or *Paludamentum*. Below are two *Victories* erecting a Trophy; one of which holds a long Tablet, perhaps to write down the Actions of

of the Conqueror: *Victories* of which sort writing we find upon Monuments and Medals. On each side, below the Girdle, are Heads of *Bacchantes* or Satyrs. In the Cabinet of this Monastery there's a Marble Trophy, which was once accompanied with a human Figure, now broken, and nothing remaining thereof but a Foot: The Cuirass is full of Ornaments, and an excellent Piece of Workmanship.

IV. In the *Suovetaurilia* we find a Cuirass with Scales, probably of Brass or Iron; which Scales are in the Shape of a Lozenge, and cover the whole Surface of the Armour. Such a Cuirass is also seen above, taken from the Column of *Antoninus*, where the Scales are of the same Form, and much more visible. As this Soldier has a distinguishing Helmet on, he is probably one of the *Prætorian* Band, as well as the other who keeps Guard before the Emperor's Tent, and whose Cuirass consists of smaller Scales.

We must take care not to confound, as many have done, those Cuirasses with Scales, call'd in *Latin Loricæ squammatae*, with the Cuirasses compos'd of Hooks or Chains, that are let one into another, call'd by the *Latins Loricæ hamatae*, and by us Coats of Mail: The first of which were made of small Plates of Iron put one upon another with some Symmetry, and by consequence different from the Coats of Mail, compos'd of small Hooks or Chains.

18 The following Soldier¹⁸, taken from a *Roman* Bass-Relief, wears a Cuirass, which seems to be made of a Beast's Skin with the Hair: He has a Belt on, at which it's thought his Sword hung. It would be to little purpose to represent here the other Cuirasses, which are seen in great number in this Volume.

V. The *Paludamentum*, a kind of Cloak thought to be the same with the *Chlamys*, *Florus* tells us came from *Hetruria*. 'From thence, says he, came the *Fasces*, the *Trabeæ*, the Curule Chairs, the Rings, the Collars, the *Paludamentum* and the *Prætorian*. From thence also came the Custom of triumphing in golden Chariots, drawn by four Horses, the *Togæ pictæ*, the *Tunicæ palmarum*, and, in short, all the other things that contribute to the Dignity and Majesty of Empire.' But we have spoken sufficiently of the *Paludamentum* in the Beginning of the third Volume.

C H A P. III.

I. The Shields, and their different sorts. II. The Shield of Achilles. III. The Shape of two Shields. IV. The Macedonian Shield very much esteemed. V. The *Argyraspides*. VI. Some remarkable Shields.

I. **W**E call by the general Name of Shield all the different sorts of that defensive Piece of Armour, which nevertheless had each their particular Name. The largest of these were call'd by the *Latins Scutum*, and by the *Greeks* θυρεός and σάκκον; but others of them that were in use among the Cavalry, and some part of the Infantry, had the Name of *Clipeus*, in *Greek* κλεπίς. *Livy* plainly shews that the *Clipeus* was different from the *Scutum*, where he says that the Soldiers of the first Class were arm'd with the *Clipeus*, the Helmet, the Cuirass and the *Ocreæ*; and those of the second Class with the *Scutum* instead of the *Clipeus*, and with all the rest of the Armour of the first Class, except the Cuirass. Learned Men are of Opinion that the *Clipeus* and *Scutum* were always distinguish'd by the Ancients, and never us'd by them indifferently for one another; which

Notion

Notion I do not take upon me to oppose, tho' I think I have some reason to believe the contrary.

Another sort of Shield was call'd *Parma*, and was less than the *Clipeus*, tho' this was sometimes of a larger Size, at least three Foot in diameter. What they call'd *Pelta*, which comes from the *Greek* Word *πέλτη*, was still less than the *Parma*, and of a different Shape: This was also call'd *Cetra*, and the two Words were synonymous, tho' there are some Authors that seem to distinguish them, saying that the *Cetra* was very like the *Pelta*. But of each of these several Species of Shields we come now to speak; after which we shall add the *Ancilia* or sacred Shields, which were of a particular Form.

II. The first sort of Shield, call'd by the *Greeks* *σάκκος* and *θυρεός*, and by the *Latins*, *Scutum*, was sometimes of a prodigious large Size, covering almost the whole Body. M. Boivin, a Person well skill'd in Antiquity and in the Knowledge of the *Greek* Tongue, has given us the Shield of *Achilles*, with all the Stories that were there represented; in which he has exactly follow'd *Homer's* Account of them, and assign'd to each of the Images and Stories, taken notice of by that Poet, its proper place. Thus he has plac'd in the Center the Figure of the Heavens, border'd with the twelve Signs of the Zodiack; and in the grand Circumference, has dispos'd twelve Compartments, which exhibit the twelve Stories plac'd there by *Homer*. The three first represent a City in Peace, where, 1. Nuptials are celebrating; 2. People assembling; 3. a Senate conven'd. The three next represent a City in War; where, 4. the Besieg'd make a Sally; 5. the Shepherds and their Flocks are taken in an Ambuscade; 6. an Engagement appears. The following three regard Agriculture, viz. 7. Plowing; 8. Harvest; 9. a Vintage. The three last exhibit a pastoral Life, by representing, 10. Oxen and Lions; 11. Sheep and Shepherds Huts; 12. a circular Dance. All these are very distinctly express'd, tho' the Shield that he has publish'd is not above seven or eight Inches in diameter: From whence he concludes, and with good Reason, that those Persons were mistaken, who said it was impossible that all the Images, describ'd by *Homer* upon this Shield, could be distinctly perceiv'd there, and that the Men upon it could appear no bigger than Flies. This Representation of M. Boivin's contains all that *Homer* has put upon this Shield of *Achilles*; and that in so clear and distinct a manner, that nothing escapes our Sight. The Men upon it seem to be about an Inch high, and yet this is but a small Image of *Achilles's* Shield, if compar'd with his real great Shield, whose Diameter must have exceeded four Foot and a half: For the Shields of that time cover'd the whole Body, the Head excepted, as is evident from many Passages in *Homer*; so that, according to this Account, the Figures must have been of a tolerable Size, and by consequence a Man pictured, not less than seven or eight Inches high, and yet nothing in *Homer's* Account left out. Thus this Objection is answer'd, without any Possibility of Reply. But another Difficulty however may be propos'd, not so easy perhaps to be resolv'd, which is this: A Shield of four Foot and a half or more in diameter, was certainly a good Cover for a Warriour against the Blows of the Enemy; but then, which way could he himself fetch a Stroke from behind this Machine, which was equal in Circumference to a Chariot-Wheel? This seems very difficult to comprehend, unless it be suppos'd that these Shields were concave, and bending inward like that of the *Roman* Legionaries, which resembled a hollow Tile; upon which there would be as much room for the Images mention'd by *Homer* to be there, as if they had been flat, without hindering *Achilles* at the same time from fetching a Blow from behind it.

III. There are two Shields of an oval Figure represented in a Sacrifice in the second Volume, which cover the Man all over, excepting the Head; but for-

asmuch as the Oval was narrow, the Warriour found no Inconvenience from it.

IV. Among the Shields of the *Greeks*, those of the *Macedonians* made of Brass were in greatest Esteem; the Diameter of which was eight Palms, and the Form very little concave. *Ælian*, who ascribes this Size to them, probably means no more than the little Palm or *παλαιστή*, which was but the breadth of a Man's Hand; which being suppos'd, the Diameter of this Shield will not exceed two Foot and a half. *Plutarch*, in the Life of *F. Quintius Flaminius*, calls the *Macedonian* Shield *Pelta*; a Name which seems not to agree with what other Authors understand by *Pelta*. In the Life of *Numa* he also calls the *Ancilia*, *Peltæ*.

The *Greeks* had a Custom of graving upon their Shields the first Letter of the Name of their City, as the *Sicyonians*, for Example, the Letter Σ , the *Lacedæmonians* Λ , and so others, according to *Xenophon*.

V. Among the *Macedonian* Troops there was a Body call'd *Argyraspides*, from their having silver Shields, as the Name imports, tho' perhaps they were only wash'd over with Silver, or cover'd with silver Plates, it being not very probable that so much Silver should be applied to the making of Shields for the Soldiers.

VI. The Shield of *Alcibiades* was however much richer, if we may believe *Athenæus*, and was made of Gold and Ivory, with a *Cupid* express'd upon it embracing the Thunderbolt; an excellent Symbol of an effeminate Warriour, as *Alcibiades* was. But their Shields were made of different sorts of Matter: For we find *Demosthenes*, an *Athenian* Captain, providing his Marine Forces with Shields made of Willow, which seems to be but a poor sort of Defence. *Herodotus* says it was the *Carians* who first introduc'd the Custom of marking their Shields, and putting Handles to them. The following Plate exhibits two *Greek* Shields, one of which is *Telamon's*¹, and of an oval Form, resembling a large Bason with a broad Border; and the other *Pyrrhus's*², the Form of which is a long Hexagon.

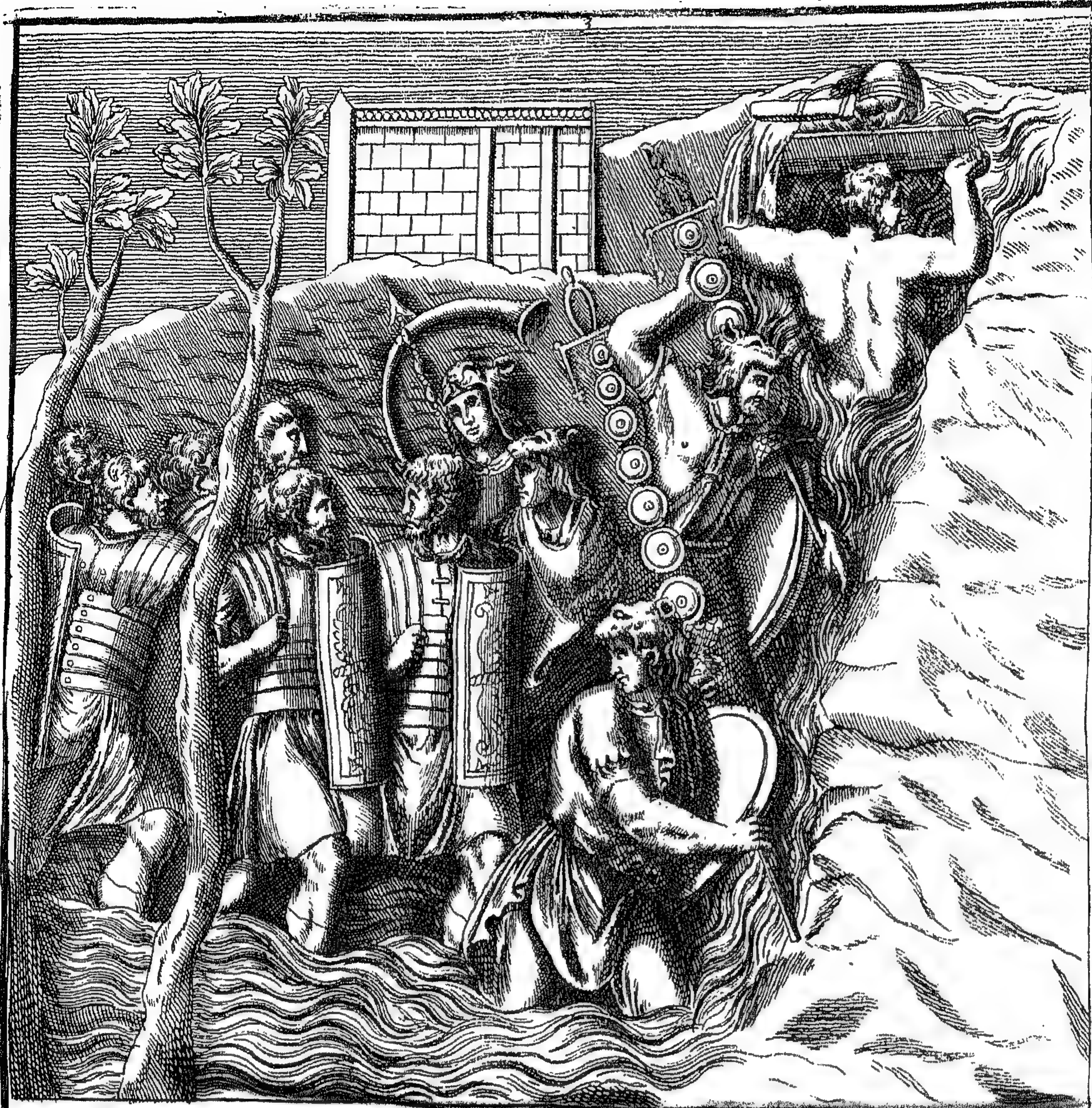
PLATE
VIII.

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CHAP. IV.

I. The Concave Shield of the Romans, used for several Purposes. II. Another sort of Roman Shields of an Oval Figure. III. Brass Shields. IV. Shields of several Nations.

I. **T**HE *Scutum* or Shield of the *Roman* Legionaries was Concave, and of the Shape of a hollow Tile; and if compar'd with the Stature of the Picture of the Man, seems to have been about two Foot and a half long, its Breadth, taken together with the whole bending, not exceeding a Foot and a half. This Shield was formerly of Wood, as *Plutarch* informs us in the Life of *Furius Camillus*: But then that *Roman* Captain had them cover'd with Plates of Iron, the better to keep off the Blows. This Piece of Armour serv'd besides for many other Purposes, as to form the *Testudo* in Sieges, and to carry the Soldiers little Baggage when they pass'd a River. We have here given the Figure of a Soldier passing a River naked³, and carrying his Shield with the hollow side upward, in which are his Cloaths, and the rest of his Baggage. These Shields were always adorn'd on the outside with some Figure; some having, as we shall see below, the Thunderbolt upon



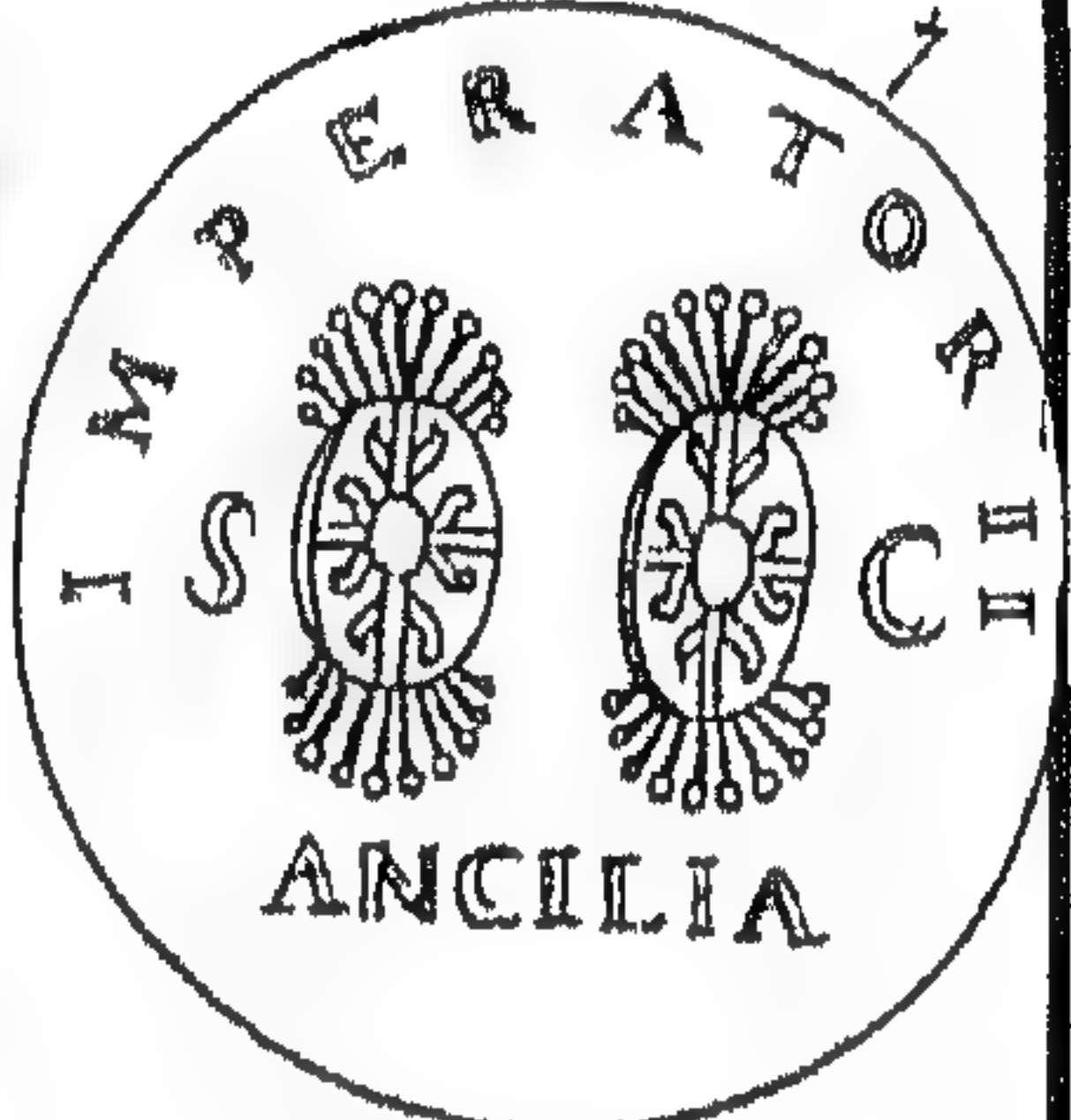
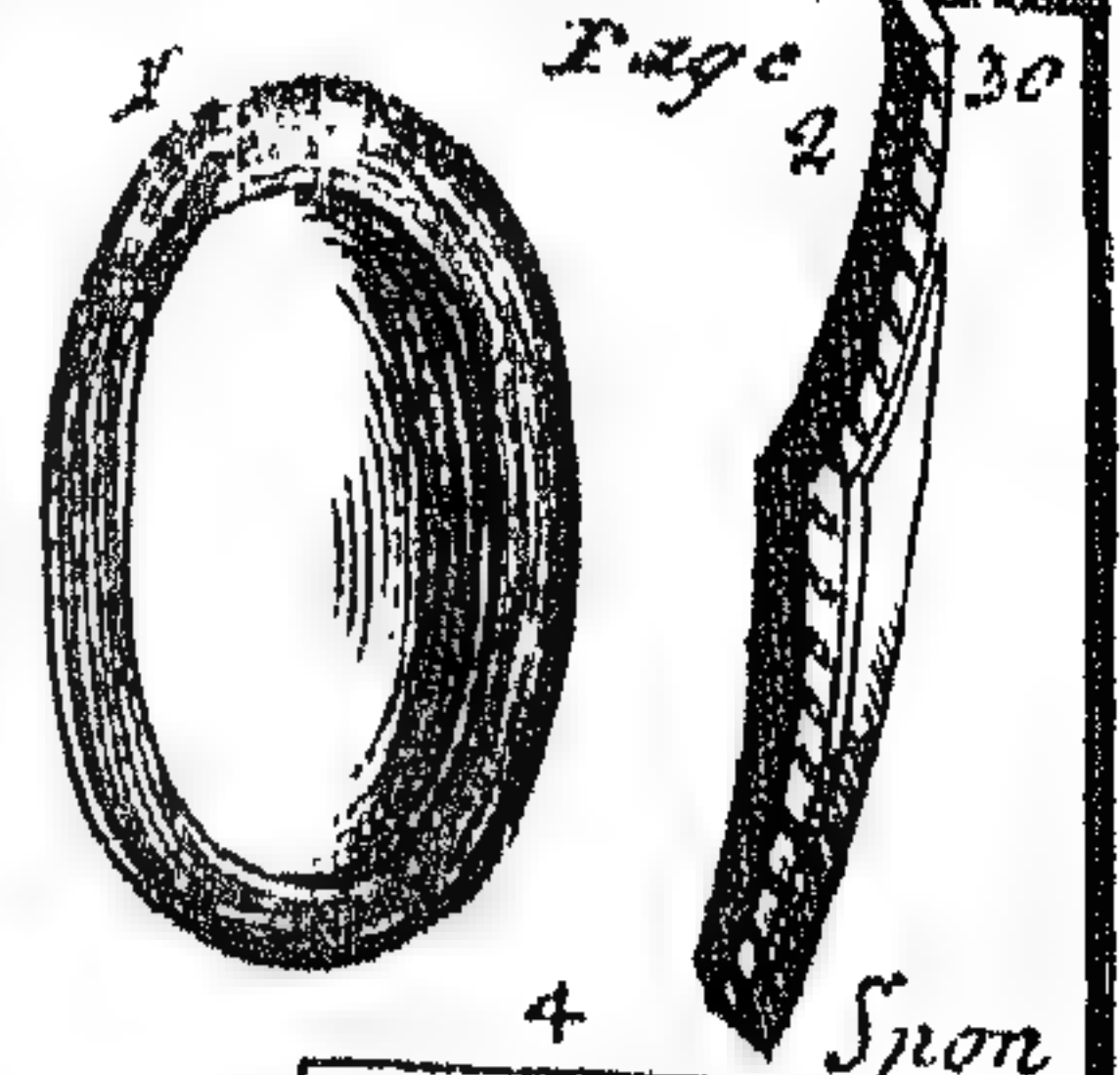
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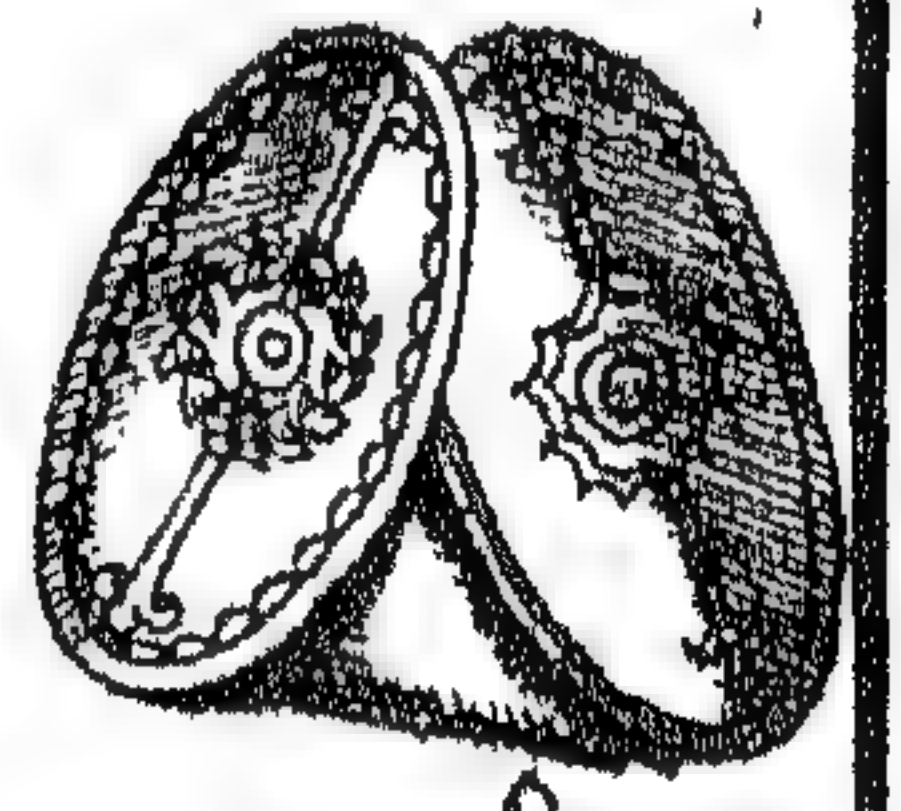
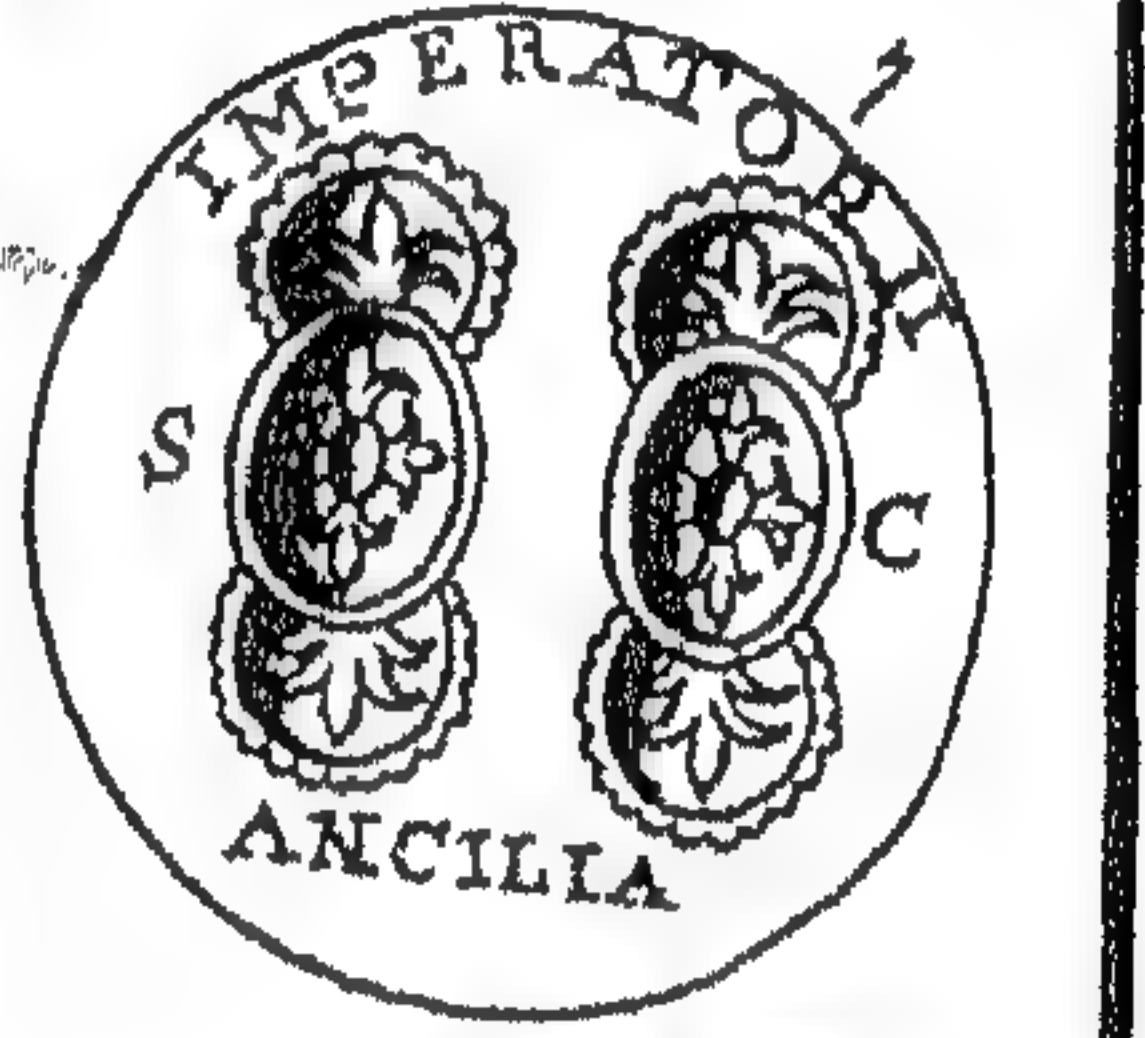
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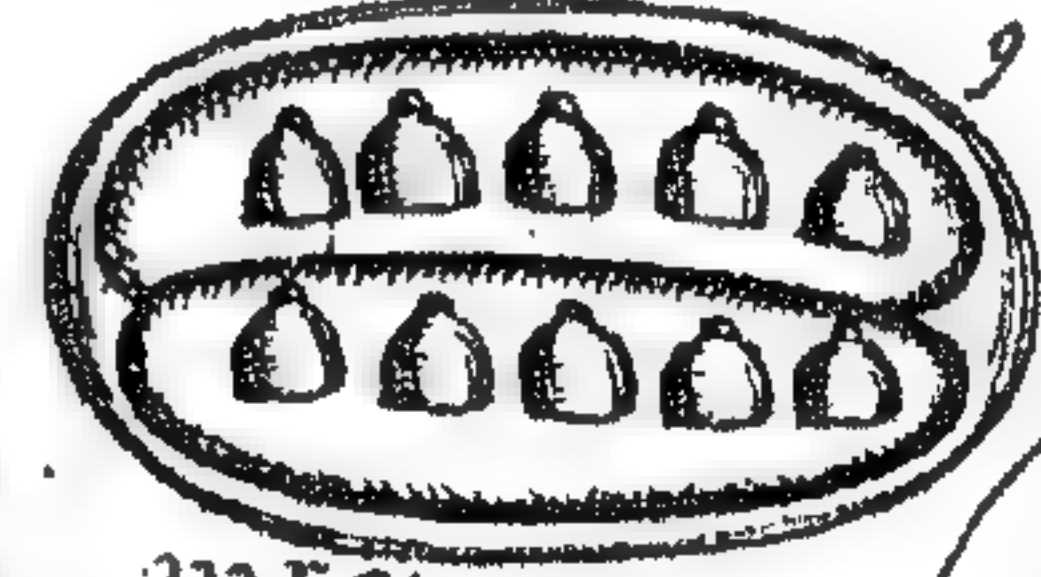
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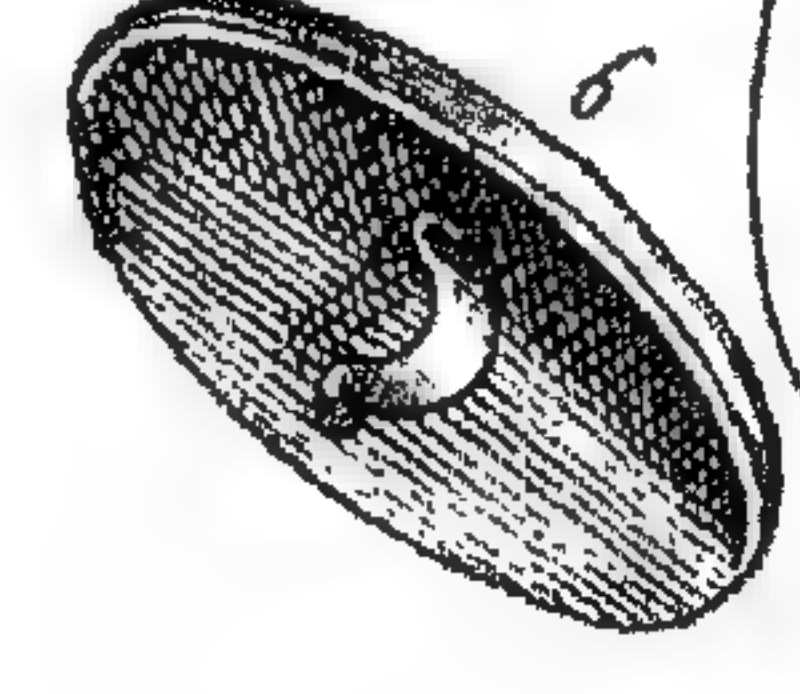
Baudet



Maffei



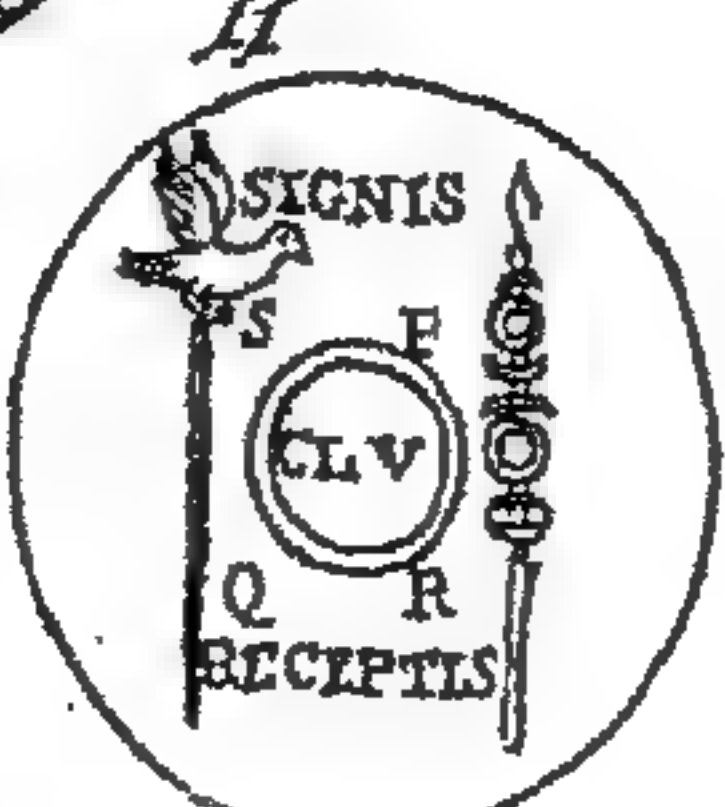
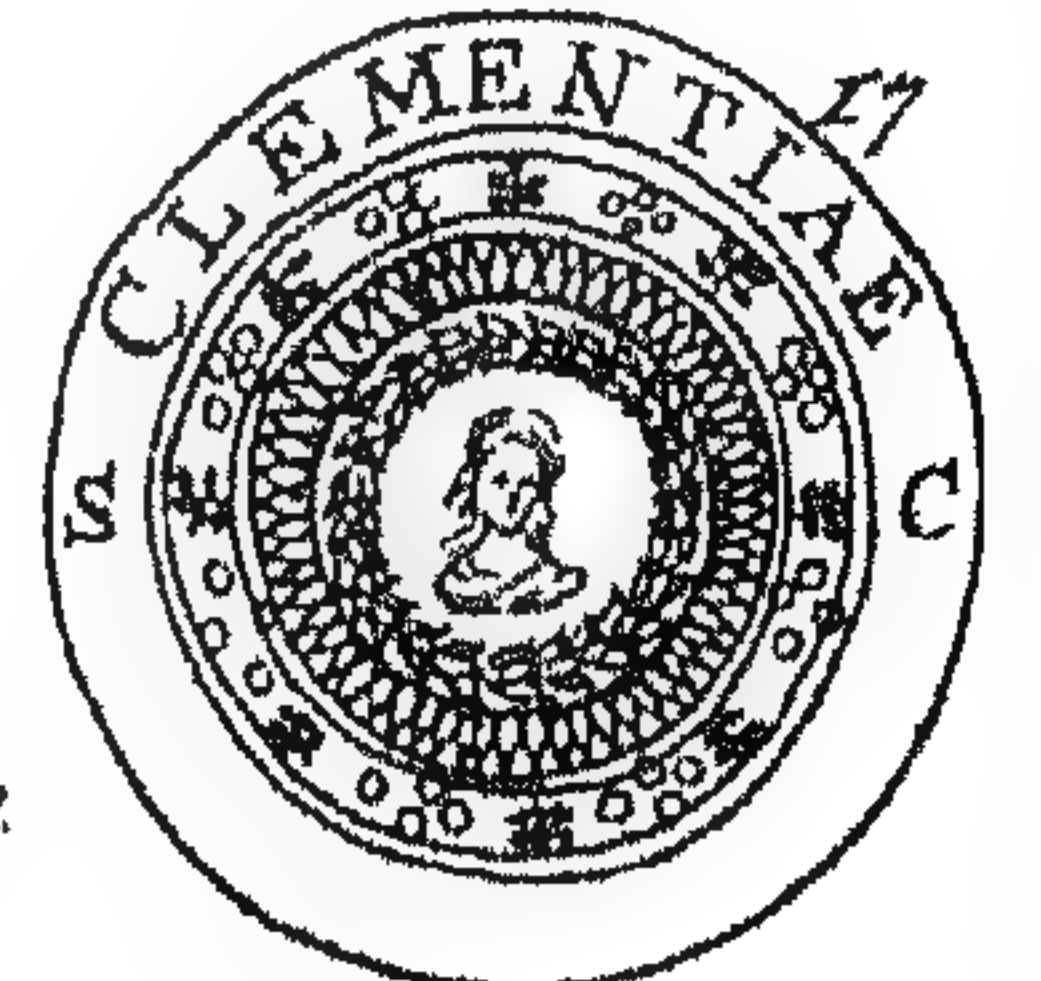
M^r Charlet



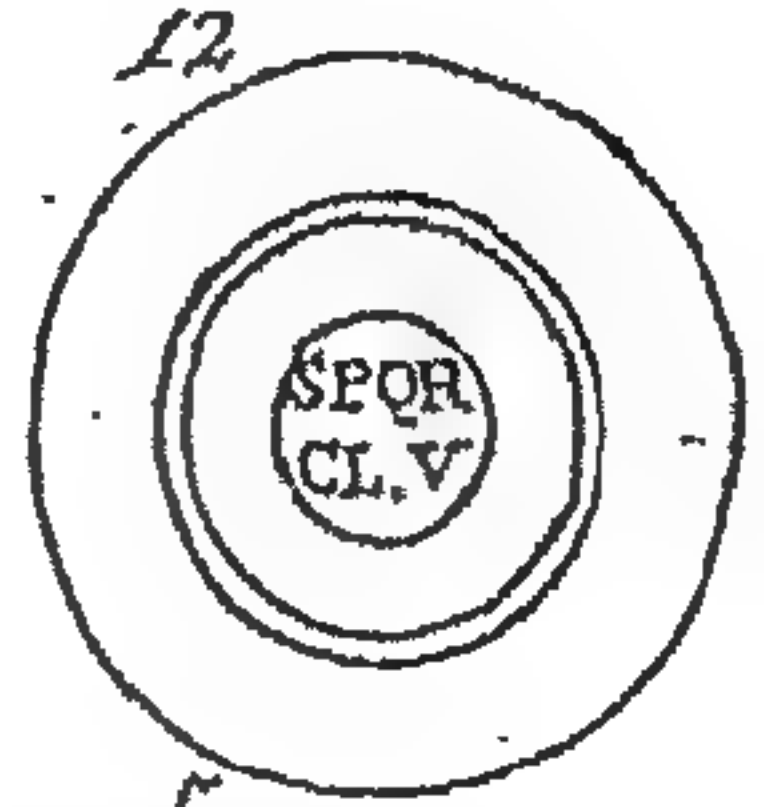
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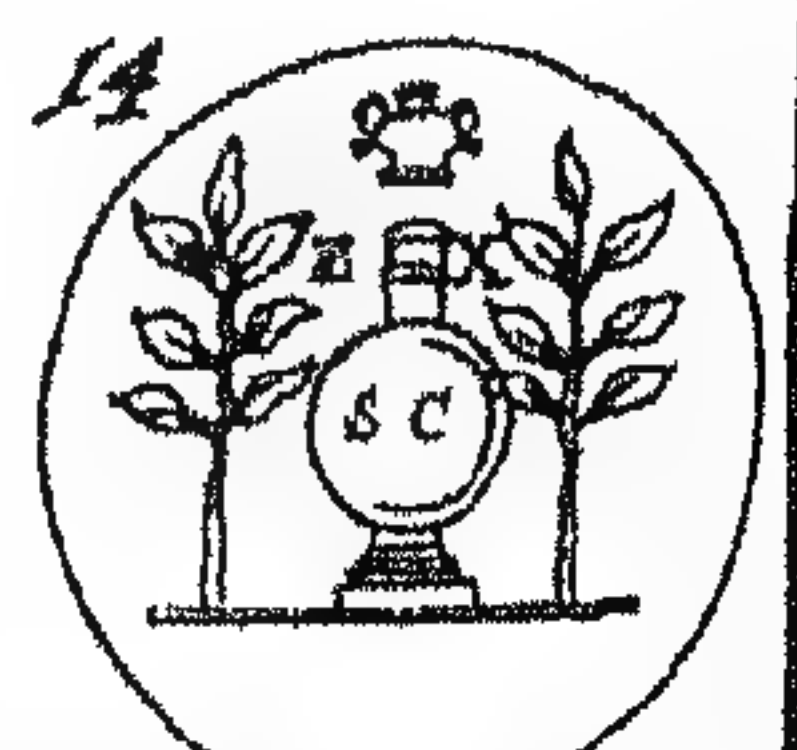
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Spon Plate 8

upon them, which perhaps denotes the Thundering Legion. Most of the Soldiers had this sort of Shield in *Trajan's* time, as may be seen upon his Column, and other Monuments of the Victories of that Emperor.

II. There was another Shield of an oval Form, that was lighter than the former, but yet of equal Length, which other Soldiers made use of, as also Ensigns, and they that wore the Lion's Skin upon their Head, and likewise the Cavalry: Of both which Shields we have the Form in this Plate, where we see Ensigns passing the River with oval Shields, and other Soldiers following them with long concave Shields, such as we have been just describing. This oval Shield became in time of more common Use than the other: For the Legionaries for the most part had them in the time of *Marcus Aurelius* and the following Emperors. There was however always a certain number of Soldiers with the concave Shields, on purpose to form the *Testudo* when they assaulted a Town or Fortrefs, as we see upon the Column of *Marcus Aurelius*. The ancient *Greeks* had also the concave Shields for the same purpose, they having taught the *Romans* the Use of the *Testudo*; the Form of which we shall see in the Sieges of Places.

III. In the time of *Servius Tullius*, *Dionysius Halicarnassensis* tells us, they made Shields of Brass: The same also appears from *Pliny*, who says that all the Armour of the *Samnites* was of Brass; forasmuch as when they were conquer'd, the *Romans* melted down their Arms, and made thereof the *Colossus* of *Jupiter*, which they plac'd in the Capitol. The People of *Campania* had also both Shields and Swords of Brass.

IV. But besides the oval Shields, we find others sometimes of a long *Hexagon* Figure, which the *Romans* took either from the *Dacians*, or *Germans*, or *Gauls*, among whom such sorts of Shields were in use, as we see in ancient Monuments and Trophies. We have already seen a Man with one of an *Enneagon* Figure, in the Cabinet of the Abbot *de Fontenu*, the Form of which is very singular: For altho' it cover the Shoulders of the Man, yet it is of such a Length as to reach the Ground; which agrees well enough with what *Xenophon* says in his Institution of *Cyrus*, that the *Egyptians*, to the number of a hundred and twenty thousand, came arm'd with Shields that reach'd down to their Feet, with long Pikes, such as they use at this Day, and *Copides*, which were a sort of Axes with two Edges; and in another place, that their Shields were so large, that they were an Impediment both to Action, and to their seeing. The same Author repeats the same thing elsewhere, and says that their Lances were long and strong, and that their Shields cover'd their Bodies better than their Cuirasses and *Gerræ*, because they cover'd their very Shoulders. In the Figure above, the Shield is fasten'd to the Arm under the Shoulder, as may be there seen. *Xenophon* says also, that in the Expedition of *Cyrus*, the *Egyptian* Soldiers had *Gerræ*, and that their wooden Shields reach'd as low as their Feet; and adds in another place that the Shields of the *Egyptians* were of Wood. All which would incline one to think that 'tis an *Egyptian* Shield that's here represented, covering the whole Body of a naked Man. 4

We have already taken notice of another sort of Shields that were round and very concave, such as is that in this Plate: But besides this, there were also others 5 whose Convex side terminated in a kind of Cone; one of which is here also exhibited at the bottom of the Plate (N^o. 19.)

CHAP. V.

I. *What the Parma was, what kind of Shield; II. and the Pelta, another sort, used by several Nations. III. The Cetra the same as the Pelta. IV. The Ancilia, and their History. V. Images of the Ancilia. VI. The Gerra, a sort of Shield. VII. A remarkable Shield of the Gauls.*

I. **W**HAT the Romans call'd *Parma*, was for the most part a small round Shield, as appears from *Varro*, who says it was so call'd, *quod à medio in omnes partes par sit*, from its being equally extended from the Center to the Circumference. Of these round *Parmæ*, *Polybius* says, there were some three Foot in diameter. The Matter of them was Leather, tho' *Suidas* seems to restrain that sort of *Parma* to *Carthage* only. The *Thracian Parma* was long, like the *Roman Scutum*, from whence it was customary to provide the *Thracian Gladiators*, as they were call'd, with the *Parma*. *M. Fabreti* is also of Opinion that it resembled the *Roman Scutum*, and was shap'd like a hollow Tile, but that it was much less; which Opinion he founds upon some Passages in certain Authors, who have distinguish'd the *Thracian* from the *Roman Parma*, as also upon a Passage in *Martial*:

*Hæc quæ sæpe solet vinci, quæ vincere raro
Parma, tibi scutum pumilionis erit.*

It appears from several places in the *Roman Historians*, that the Cavalry made use of this sort of Shield, the *Parma*: Which being granted, I cannot see where-
~~in the ordinary Parma differed from the Clipeus. From Parma comes the di-~~
minutive *Parmula*.

II. The *Pelta* was another sort of Shield, pretty much the same thing with what they call'd the *Cetra*: It was a light Piece of Armour, and shap'd like a half Moon or Semi-circle. The Shields of the *Amazons* were of this kind, as we learn from *Virgil*:

Ducit Amazonidum lunatis agmina peltis.

And of this kind also or very like it, is the Shield of *Hippolyta* the *Amazon*, the Figure of which, taken from the Cabinet of *Brandeburgh*, we shall exhibit hereafter. Two other *Amazons* represented above, have the *Pelta* of this Form on one side; that is, round like the bottom of a half Moon, but on the other they have two Cavities; which Form of the *Pelta* is pretty common in ancient Monuments. A *Numidian Cavalier*, exhibited hereafter, has also a *Pelta* exactly like this; which sort of Shield we know was in use among the *Africans*. Shields of this Form are also sometimes met with in *Roman Monuments*. Thus in the *Narbonnensian Sacrifice* represented in the second Volume, where a Swine is offer'd for the Lustration of their Arms, we find in a Heap of Armour a *Pelta* of this sort. The like also we have seen without almost any Difference in the Images of the *Hetruscan Soldiers*; which is a Proof that this sort of Shield was in use in many Nations. *M. Baudelot* has likewise lately given me the Design of a *Pelta*
6. exactly of this kind⁶.

Nor does any thing better agree with the *lunata peltæ* in *Virgil*, than the Shields we are now treating of; besides which, we are abundantly convinc'd they must be *Peltæ*, because they seem not to correspond with any other sort of Shield. The
Thracian

Thracian Peltæ, according to *Dionysius Halicarnassæus*, were very long and narrow, which likewise agrees well enough with the Shields here given; but then this by no means agrees with *Suidas*, who makes them quadrangular.

III. The *Cetra* was a Shield that very much resembled the *Pelta*, if it was not the very same, seeing *Livy* uses them indifferently for one another: Thus in one place he says that the *Pelta* is not unlike the *Cetra*; *Pelta cetræ hand dissimilis est*: And in another, that they laid in the Night between the two Camps an Ambuscade of Soldiers arm'd with *Cetræ*, which they call'd *Pelastæ*: *Noctæ cetratos, quos pelastas vocant, loco opportuno inter bina castra abdiderat.*

The *Cetra* was in use among many Nations, and also among the *Romans*: For the Emperor *Caligula*, *Suetonius* says, march'd in a kind of Triumph over the Bridge which he had built, and went from *Puteoli* to *Baiæ* mounted upon a Horse magnificently harness'd, wearing a Crown of Oak Leaves, arm'd with an Ax, a *Cetra*, and a Sword, and habited in a *Chlamys* of Gold. *Cæsar*, in the first Book of his Commentaries, says that *Afranius* and *Petreius* had fourscore Cohorts arm'd with *Cetræ*, which were brought from that part of *Spain* call'd *Uterior*, where the *Cetræ* were in use. *Servius* says the *Cetra* was a leathern Shield, made use of by the *Spaniards* and *Africans*. It was likewise in use in *Great Britain*, according to *Tacitus*. We have just observ'd from *Livy* that the *Cetra* was the same thing with the *Pelta*; which way of calling the same thing by different Names in various Authors, is what so embarrasses the Commentators.

From what has been said it may be concluded, that the ordinary Form of the *Pelta* was what we meet with in the *Narbonensian* Sacrifice, and in the *Amazon* on foot: But we shall exhibit two Figures of this Shield in this Plate. It may also be inferr'd from what has been already observ'd, that there were *Peltæ* of different Forms, and that this Name was given to other Shields, as appears from *Plutarch*, who calls the *Ancilia* and *Macedonian* Shields *Peltæ*. We shall likewise see in the Wars of the *Amazons* below, that they are arm'd with Shields different from these *Peltæ*, which farther confirms that the *Peltæ* were of different Forms.

IV. The *Ancilia*, which Word in the singular Number is *Ancile*, were Shields, whose Form we are perfectly acquainted with, tho' for this we are beholden to remaining Monuments; Authors not agreeing in their Description of it: For some will have them to be large Shields, others small, some round, and others to resemble the *Thracian Peltæ*. But among all the Writers that have taken any notice of them, *Plutarch* comes nearest the true Form; tho' indeed he calls them a kind of *Peltæ*: For he says that they are hollow, and winding like a Shell; and in another place, that they were not of a circular, but rather of an oval Form, did not the Windings on each side alter it. The Length of these Shields, if compar'd with the Stature of the two Men that carry them, seems to be two Foot and a half. These *Ancilia* were sacred Shields, religiously kept, and born only in solemn Processions; and the Story of them this. A Shield, it is said, fell down from Heaven, upon which the *Haruspices* were consulted, who answer'd that the Empire of the World was ensur'd to that City that should preserve this sacred Treasure: Whereupon *Numa Pompilius*, the better to secure it against such as should attempt to steal it, caus'd many others to be made exactly like it, and to be laid up in the Temple of *Mars*. Thus *Dionysius Halicarnassæus*. But *Plutarch* gives an Account of this something different from him: 'Tis reported, ' says he, that King *Numa* related many wonderful things of this Shield, which ' he said he had learn'd from *Egeria* and the *Muses*, viz. that it was sent for the ' Safety and Preservation of the City, and that it was to be preserv'd with eleven ' others of the same Form and Dimensions, that if any one should attempt to steal

it, he might not be able to distinguish it from the counterfeit ones. *Marmurius* was the Person that made these Shields, for which he had no other Recompence than the Honour of being the Artificer. *Tullus Hostilius* doubled the Number of the *Ancilia*, and of the *Salii*, their Guardians and Priests of *Mars*. The Ceremony of the *Ancilia* was perform'd in this manner: They were taken from their place, and carried by the *Salii* in Procession through the City, leaping, dancing and singing Verses suitable to the Solemnity. The Feast begun on the Kalends of *March*, and lasted thirty Days; during all which time no Work was to be done of any consequence, no Body allow'd to marry, no Voyage or Journey to be undertaken, nor any military Expedition; all which was religiously observ'd in ancient Times, it being reckon'd unfortunate to do otherwise; and as *Suetonius* says, *antiquitus infausum haberetur*: But in After-times it does not appear this was so religiously observ'd.

- 7 V. These *Ancilia* occur sometimes upon Medals, as they are here represented, as also upon a Medal of *Antoninus Pius*, with this Inscription, *Ancilia*. As to the other *Ancilia* taken from a Gem, which two Men have upon their Shoulders
- 8 hanging on a Staff; the *Hetruscan* Inscription, the Form of them so different from those of *Rome*, and the Habit of the two Men that carry them, afford Reason to believe that they are not *Roman Ancilia*; but that this is rather some *Hetruscan* Ceremony resembling a *Roman* Solemnity: For these People both in their Religion and Rites agreed in many things with the *Romans*. And tho' generally speaking the *Romans* borrow'd more from the *Hetruscans* than they did from the *Romans*, yet there's no room to doubt but that this Commerce in Religion and Ceremonies was reciprocal.

VI. The *Greek* *Τέρεον* was a kind of Shield made use of by the Eastern *Persians*, and was made of Ozier, cover'd with the Skins of Oxen: *Xenophon* mentions these several times, and so does *Lucian* also.

- 9 VII. We have here a Shield of an uncommon Form, full of Boffes like a Woman's Breast: It was communicated to me by the Abbot *Charlet de Langres*, to whom I have been oblig'd for many other Monuments of Antiquity.

C H A P. VI.

- I. The Shape of the Roman Shield call'd *Clipeus*: A singular Shield of *Asdrubal*.
 II. A Shield of *Scipio* representing his Continencc; this Story related by *Polybius*;
 III. Delivered more at large by *Livy*. IV. Remarks on this Shield.
 V. The *Clipei Votivi* of *Augustus*. VI. Those of *Tiberius*.

I. THE *Roman Clipeus* was a round concave Shield, and by the *Greeks*, with whom it was very much in use, call'd *ἀσπίς*. The *Romans*, who borrow'd it from the *Greeks*, afterwards chang'd it for the *Sabine* Shield. But the Use of these round Shields was not however quite laid aside, seeing they frequently occur both upon Medals and other Monuments. Upon these Shields the Story of their own or their Ancestors Exploits was describ'd, as we shall see below upon *Scipio's* Shield. These also they dedicated to the Gods, and especially to *Minerva*; from which Custom comes the Name of *Clipeus votivus*, which we find inscrib'd upon Medals.

‘ The *Carthaginians*, *Pliny* says, made Shields and Images of Gold, which they carried with them to the Camp; one of which Shields, belonging to *Asdrubal*, *Q. Marcius* found when he forc’d that Camp, and reveng’d the *Scipio*’s in *Spain*, and laid it up at the Entrance of the Capitol, where it remain’d until the Temple was burnt. *Livy* says that Shield was of Silver, and weigh’d thirty eight Pounds, and that it was call’d *Martius* from the Name of him that took it. The Signal to Battle given by the *Greeks*, was by erecting a Shield of this kind either of pure Gold, or gilded. It has been already observ’d, that it was a capital Crime to throw away their Shield in an Engagement, and that both among the *Greeks* and *Romans*.

II. The Shield here exhibited¹⁰ represents the celebrated Action of *Scipio Africanus*, at the taking of new *Carthage*: It was publish’d by *Spon*, taken from the Cabinet of M. du May of *Lions*. The Original was found in the *Rhone* near *Avignon*, in the Year 1656, and is made of Silver, the Weight of which is one and twenty Pounds, and the Diameter of the Shield two Foot two Inches, and is now in the King’s Cabinet. The Story of *Scipio* express’d upon this Shield, is that remarkable one of his Continnence and Generosity in the case of a *Carthaginian* Lady that was offer’d him; and which is thus related by *Polybius*: ‘ Some young *Romans*, says he, having found among the Captives a Virgin of exceeding great Beauty, far surpassing that of other Women, and knowing *Scipio* was naturally amorous of the Sex, brought her to him, and made him a Present of her. But he, tho’ astonish’d at her Beauty, curb’d his Inclination, and generously restor’d her to her Parents to dispose of her in Marriage as they thought fit, after having thank’d the young Men that brought her.

III. This Story of *Scipio*, *Livy* relates more at large. ‘ Some of the Soldiers, says he, brought him a young Lady of an Age fit for Marriage, and of such incomparable Beauty, that where-ever she pass’d she attracted the Eyes and Admiration of every Body: *Scipio* hereupon enquiring her Country and Parents, came to understand that she was contracted to a young Gentleman call’d *Allucius*, a Prince of the *Celtiberians*; upon which causing her Parents and Lover to be sent for, and knowing the great Passion the last had for the Lady, he address’d his Discourse to him rather than to the Parents, and in these Terms express’d himself: I am a young Man as well as your self, and therefore may speak to you of the Affairs of Love without blushing: Know then that when your Lady was brought Prisoner before me, by my Soldiers, and I understood the Passion you had for her, which her Beauty also made me readily believe, I thought my self oblig’d in Honour to do by you, as I would be done to in the like Case, and therefore have to the utmost of my Power favour’d your Amour: For tho’ I might indulge the Inclinations of Youth, if I pleas’d, especially in an honourable way, and should, if I had not devoted my self to the Service of the Publick, have thought the greatest Transports toward such a Mistress pardonable, and have enjoy’d her in spite of any Rival, yet have I taken as much Care to preserve your Spouse untouch’d for your Embraces, as if she had been all the while under the Charge of her Parents; and as such make you a Present of her worthy of you and my self. *Scipio* after this address’d himself to the Parents of the Lady, who had brought a considerable Present in Gold to redeem her, and after much Importunity on their Part to receive it, seems willing to take it, and bids them lay it at his Feet: Which done, calling *Allucius*, Here, says he, take that Present by way of Addition to the Portion you are to have from your Father-in-Law; and accordingly oblig’d him to take it. The young Prince, charm’d with so much Generosity, fill’d all the Country with *Scipio*’s Praises, and never ceas’d to make his Merits known to the World.

IV. This

IV. This History is admirably represented on this Shield: *Scipio* sits there half naked, his Cloak covering him in part; *Allucius* and the Father of the Lady appearing as if they were come to his Levee, and as if he had not time to dress himself. He has a Lance in his Hand, and at his Feet are seen a Cuirass, two Helmets, two Shields, two Swords, one of which has a Bird's Head at the end of the Hilt, a Bow, a Quiver, a Horn or Piece of Armour that cover'd the Legs, of which below; and in a word, the whole military Habit. The Business seems to be transacting in his Chamber. *Allucius* has already receiv'd his Mistress from him, and has one Hand upon her Shoulder. The Parents of the young Lady are desiring *Scipio* to accept their Present of Gold, which perhaps is the Vase and the two Globes or Balls that are seen behind two Soldiers or *Roman* Officers. The Habit of the ancient *Spaniards*, both Men and Women, is here observ'd, and appears to be exactly like that of the *Mauri* their Neighbours, which we have seen upon the Column of *Trajan*. What's farther remarkable is that the Swords of the *Romans* and *Spaniards* are exactly the same, and of the same Form; which agrees with what will be observ'd below, namely, that the *Romans* made use of the *gladius Hispaniensis*, as *Polybius*, *Livy* and others inform us: All which together is a Confirmation that the Story of *Scipio* is truly represented upon this Shield. *Allucius* and two other *Spaniards* of the Company have some sort of Ornament upon their Forehead that resembles a Flower. The two Shields of *Scipio*, and that of another *Roman* there present, are of an oval Form; besides which there's another *Roman* with a Trumpet.

- V. To these Shields we have added several others that occur upon Medals.
- 11 The first is upon the Reverse of a Medal of *Augustus*¹¹; in the Center of which is read CL. V. *Clupeus Votivus*, which signifies, that it is a Shield devoted by the Senate and People of *Rome*, in Memory of the *Roman* Ensigns retaken from the *Parthians* under *Augustus*, as is denoted by this farther Inscription, *signis receptis*.
 - 12 The second Shield upon another Reverse of a Medal of *Augustus*¹², does not intimate upon what Occasion it was devoted. The third Shield upon another Reverse of one of the same Medals, hangs upon a Column¹³, where a Victory is crowning it, which denotes some Conquest obtain'd by that Emperor. The
 - 14 fourth¹⁴ hangs upon a Column between two Laurels: Which Trees *Pliny* says were planted before the Gates of Emperors and Pontifs, *ante limina excubabat*. There was also at *Rome* a certain Quarter of the City call'd *inter duas lauros*. The
 - 15 fifth is inscrib'd *ob civis servatos*¹⁵, upon occasion, as *Spon* thinks, of some Citizens sav'd, or brought back from the Captivity they were in under *Phraates* King of the *Parthians*. The Shield is here crown'd with the *Corona civica*, which was a Crown of Oaken Leaves, given in Honour to such as sav'd a number of Citizens.
 - 16 VI. The sixth Shield¹⁶ is upon the Reverse of a Medal of *Tiberius*. This the Senate consecrated to the Moderation of *Tiberius*, either out of Flattery, or perhaps at the time he dissembled that Virtue, which was when he was under Apprehensions of being supplanted by *Germanicus Caesar*, a Prince whose Virtues and Reputation gave him some Umbrage; after whose Death however he pull'd off the Mask, and committed all sorts of Cruelty: For, as *Cicero* observes, Fear
 - 17 cannot keep a Man long in his Duty. The seventh and last¹⁷ is a Reverse of another Medal of *Tiberius*, in which the Shield is dedicated to his Clemency, the Occasion whereof was this: 'That Prince, *Suetonius* says, pretended it was owing 'to his Clemency, that he did not throw *Agrippina* into the *Gemoniæ* after he 'had caus'd her to be strangled; and suffer'd the Senate, in Memory of that Act 'of Clemency, to make a Decree to thank him for it, and also to make a Present of Gold for it to *Jupiter Capitolinus*.' *Spon* is of Opinion that Present was this

this Shield. Among the *Clipei* I think may be reckon'd certain concave Shields, whose Convexity terminates in a Point, from whence there issues a kind of Nail: Such a one is that taken from a Gem in our Cabinet, carried by a Man in a long Robe, who has in one Hand a Javelin, which seems to be the *Roman Pilum*, and in the other the Shield we are speaking of. Such also are many others more or less pointed at the convex Part. These *Clipei* or round Shields were of ancient Use, as has been before observ'd, but were afterwards chang'd for others. We find also some of the *Roman Cavalry* with Shields of this kind, as we shall see in the Chapter of the Cavalry.

C H A P. VII.

I. The Swords; their Blade made anciently of Brass, tho' not commonly. II. Whether the Poets used the Word Brass to signify Iron. III. The manner of wearing the Sword. IV. The Length of the Blades of the Swords. V. The Parazonium; Swords of divers Nations. VI. Images of Swords. VII. The Pommel of Scipio's Sword, publish'd here, not certainly antique.

I. THE Origin of Swords is attended with as much Obscurity as that of most other things. Some attribute the Invention of them to the *Curetes*; but it's probable they are as ancient as the World, and that as soon as they had the Art of working Iron, they then began to make Knives, Ponyards and Swords, Instruments that were necessary for various Purposes. But it appears that Arms were of old made of Brass, mention of which is frequently made in *Homer*. *Hesiod* and *Lucretius* likewise say the same thing, and that they made them of that Metal before the Use of Iron was known: The Passage in *Hesiod* is this;

Τοῖς δ' ἦν χαλκία μὲν τεύχεα, χαλκοὶ δ' ἔτε οἶκοι
Χαλκῷ δ' ἐργάζοντο, μέλας δ' οὐκ ἔσκε σίδηρος.

In *English* thus; *They had brazen Arms, and Houses made of Brass, before they had any Iron.* The other Passage in *Lucretius* is this:

Et prior æris erat, quam ferri cognitus usus.

That is, the Use of Brass was known before that of Iron. This is also farther confirm'd by one of the *Arundellian Marbles*, where it's said that Iron was found 186 Years before the *Trojan War*. But tho' we are not to have too much Faith in these Testimonies, yet we may assuredly say, that of old, even after the Use of Iron was known, they made use of Brass for Arms and other things, which at this Day are all made of Iron. We may here recollect what has been already said of a Heap of brazen Arrows found at *Rome*, the number of which was so great, that several Boats were loaded with them. They also made use of brass Nails in their Boats, of so hard a Temper, that they could drive them as well as Iron ones: Of which kind I my self brought one from *Italy*, taken from the Ruins of *Porto*.

M. Trevisani, a *Venetian Nobleman*, has in his Cabinet of Antiquities a Sword of Brass, of a very hard Temper: I did not measure the Blade of it; but as well as I can remember, it was not a Foot and a half long. The celebrated *M. Foucault* has also such a one, the Blade of which is thirteen Inches.

M. *Fabreti* is of Opinion that the Use of Iron was so common in the time of *Trajan*, and even more early than that, that the Use of Brass in Arms and Sword-blades was wholly laid aside, and that even among other Nations also: He likewise pretends, that when *Virgil* makes mention of brazen Shields and Swords, as in the following Passage;

Æratæque micant peltæ, micat æreus ensis.

he only puts them poetically for Arms of Iron; and gives this Reason for it, that when *Strabo* describes the Arms of all Nations, he takes no notice of any being made of Brass, but the Points of the *Lusitanian* Lances, and the Shields of the *Ligurians*: But herein *Fabreti* fell short in his Observation; for *Strabo* says elsewhere, that the *Sagaridæ* or two-edg'd Axes of the *Massagetæ* were made of Brass. However he produces several Passages from Writers, where mention is made of Iron Arms, but none of Brass. But what's all this against a Magazine of Arrows dug up at *Rome*, all of Brass, with which they loaded several Boats? and against the several Swords with brass Blades found in various Cabinets, together with Nails of the same Metal us'd anciently in their Buildings? All which is a Proof that they made use of Brass in things made at this Day only of Iron.

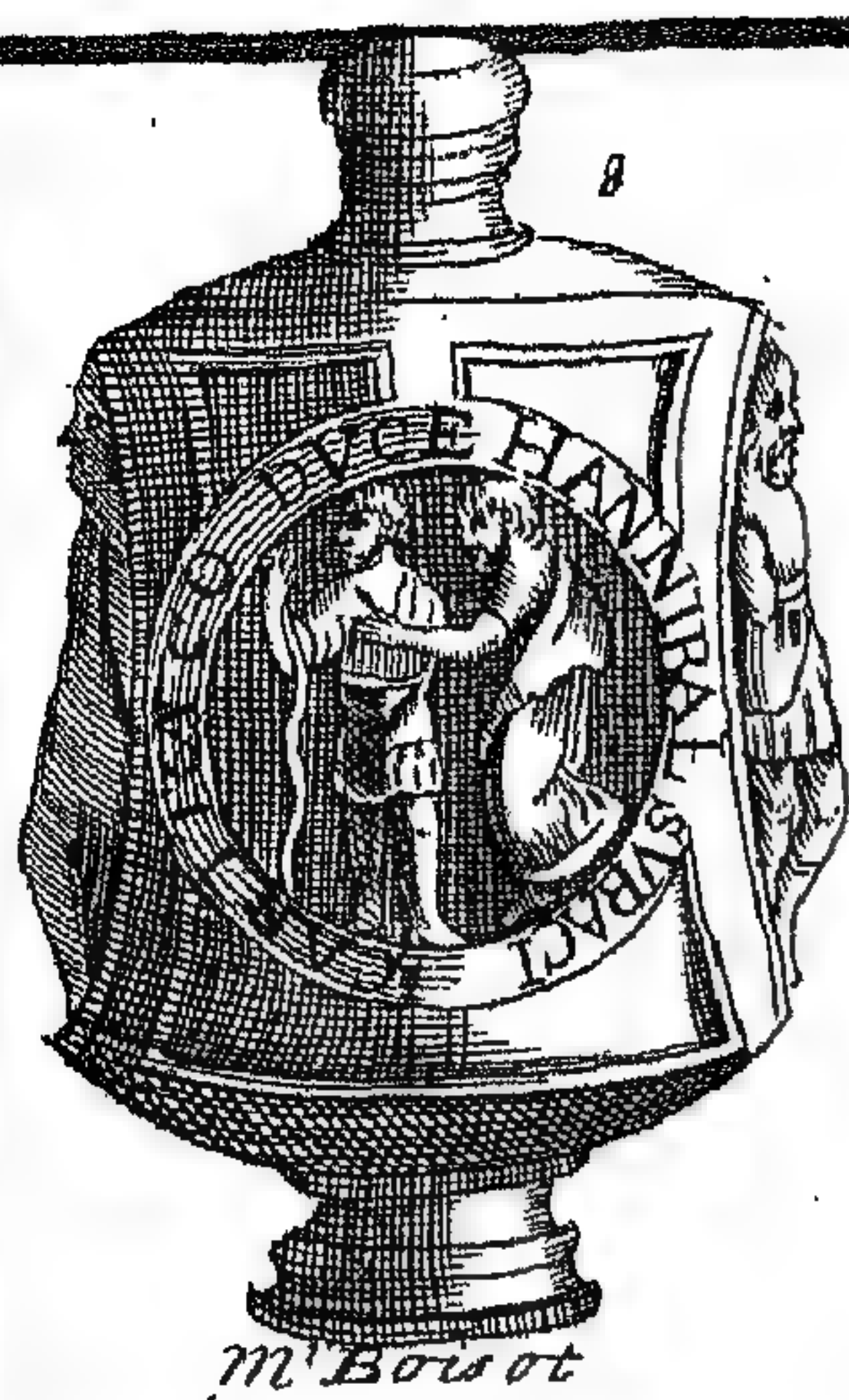
III. The manner of wearing the Sword anciently was not uniform: *Homer* says they us'd to wear it upon their Shoulders, by which he means, I suppose, that the Hilt and Handle reach'd to the Shoulders, while the Blade hung down upon their Side; which is also what *Virgil* means by these Words;

Tum lateri atque humeris Tegeæum subligat enses.

Where he speaks of the heroick Times; for in his time it was not the Fashion to wear them so. The *Romans* for the most part wore the Sword on the right Thigh; but that was not always and every where observ'd: For in certain Monuments we find ~~Soldiers wearing them upon the left~~ *Trajan's* Soldiers indeed, both upon his Column and upon *Constantine's* Arch, wear the Sword upon the right Thigh, but so high, that the Handle and Hilt reach up before almost as high as the Shoulder. That Prince himself however in a certain Speech that he's making, wears it upon the left side; which is also elsewhere observable, tho' rarely, in Monuments of that Emperor. The Soldiers wear the Sword again upon the right Thigh in the Column of *Marcus Aurelius*.

In the Arch of *Septimius Severus*, both the Emperor and Soldiers wear the Sword upon the right Thigh, tho' there are three who wear them on the left. In the Column of *Theodosius* the Soldiers likewise wear the Sword on the right Thigh; which agrees very well with what *Polybius* says, that the *Roman* Soldiers wore upon the right Thigh the *gladius Hispaniensis*, as they call'd it, the Temper of which was excellent. *Josephus* in his Wars of the *Jews*, says that the *Roman* Soldiers wore two Swords, one upon the left side, which was longer, and one upon the right, which was not above twelve Inches long: Which shews that Customs chang'd with the Times, and perhaps also at the same time in different Places. This however is certain, that both *Polybius* and *Horace*, who make the Soldiers wear the Sword upon the right Thigh, are supported by the Authority of all Monuments, from *Trajan* to *Theodosius's* time, without much Exception.

IV. This *Gladius Hispaniensis*, the Use of which pass'd among the *Romans*, had a very broad Blade, but not above fourteen or fifteen Inches long. M. *Fabreti* contends that the Swords of the Cavalry were longer than those of the Foot, and complains that in the last Edition of the *Trajan* Column, the Swords of the Cavalry are represented much shorter than they are upon the Marble, especially in



M. Bouot



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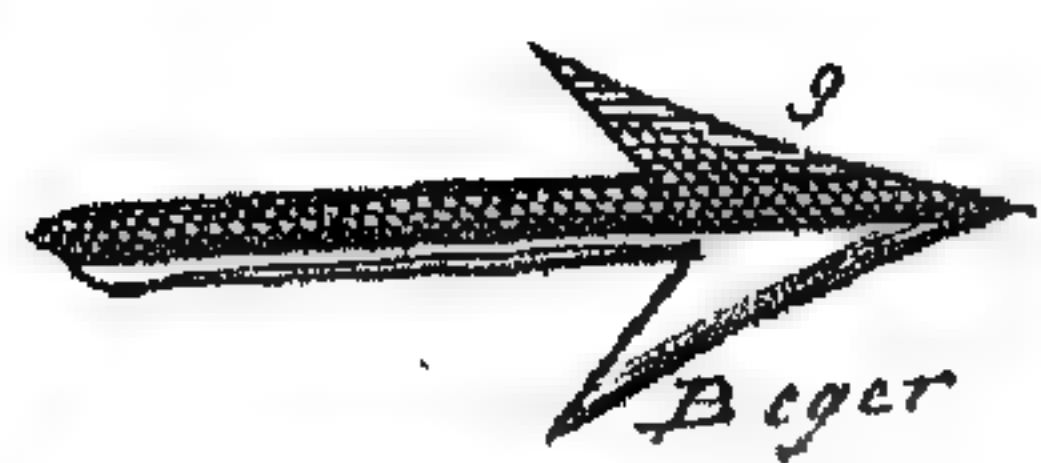
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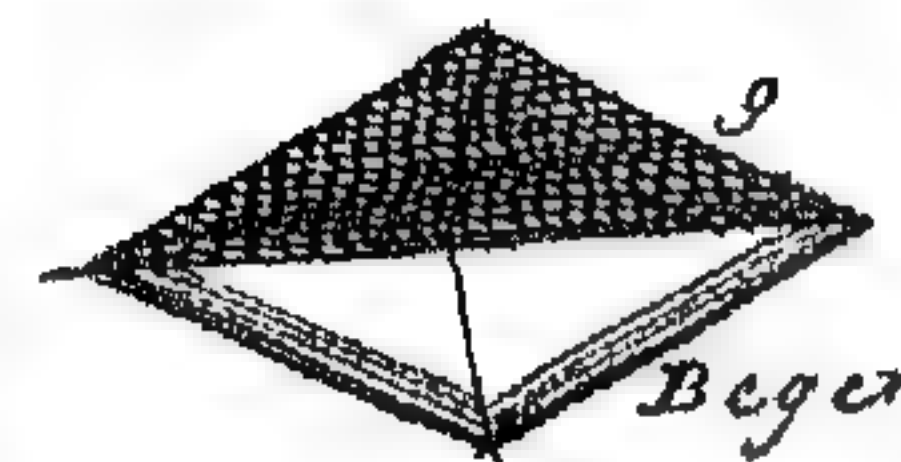
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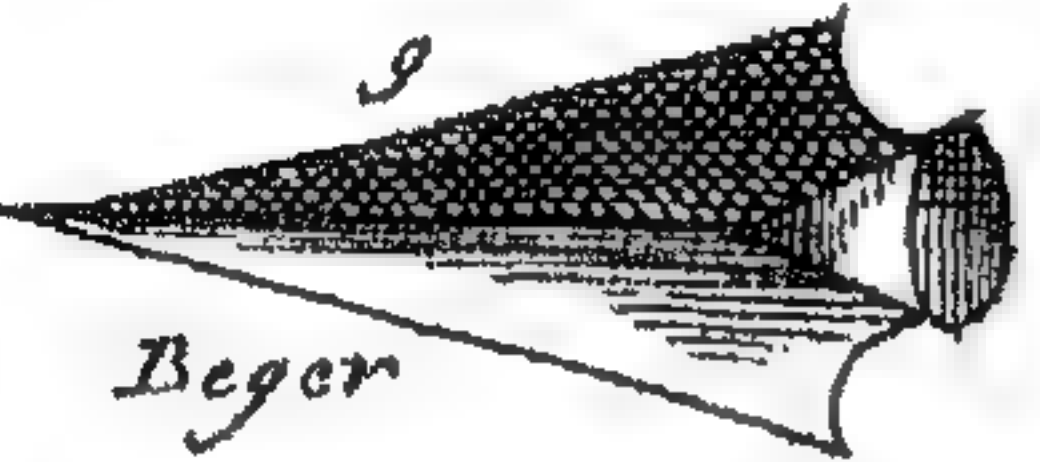
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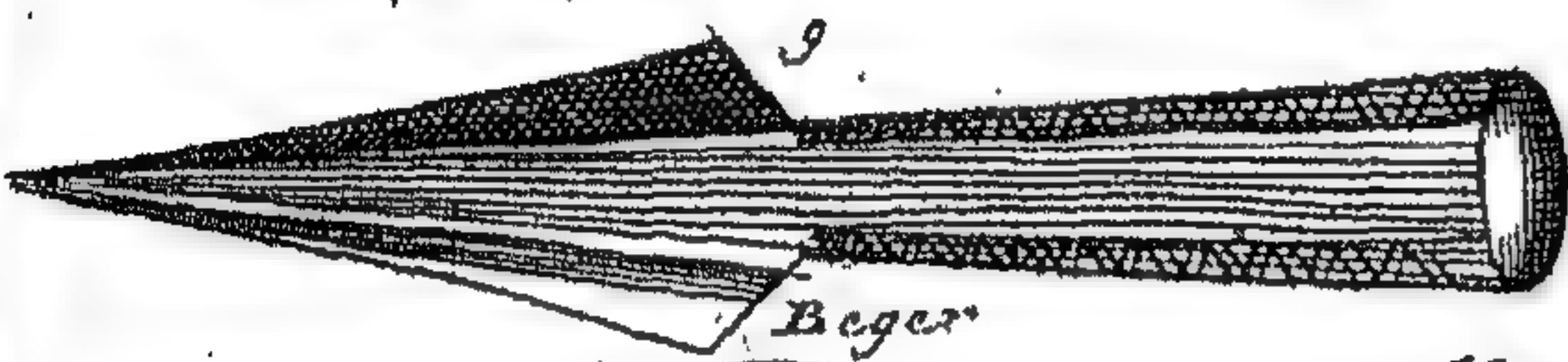
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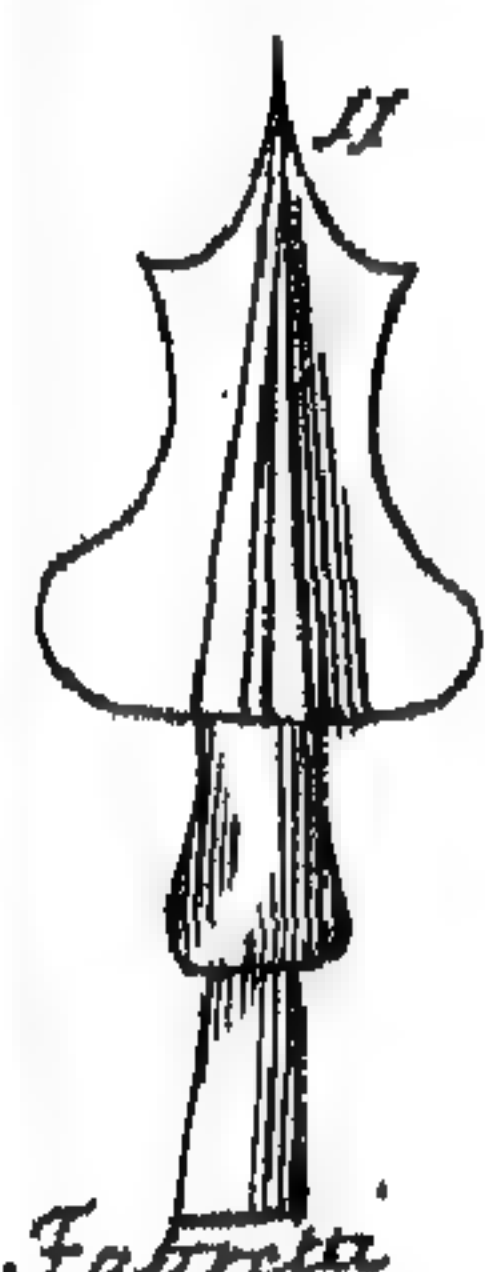
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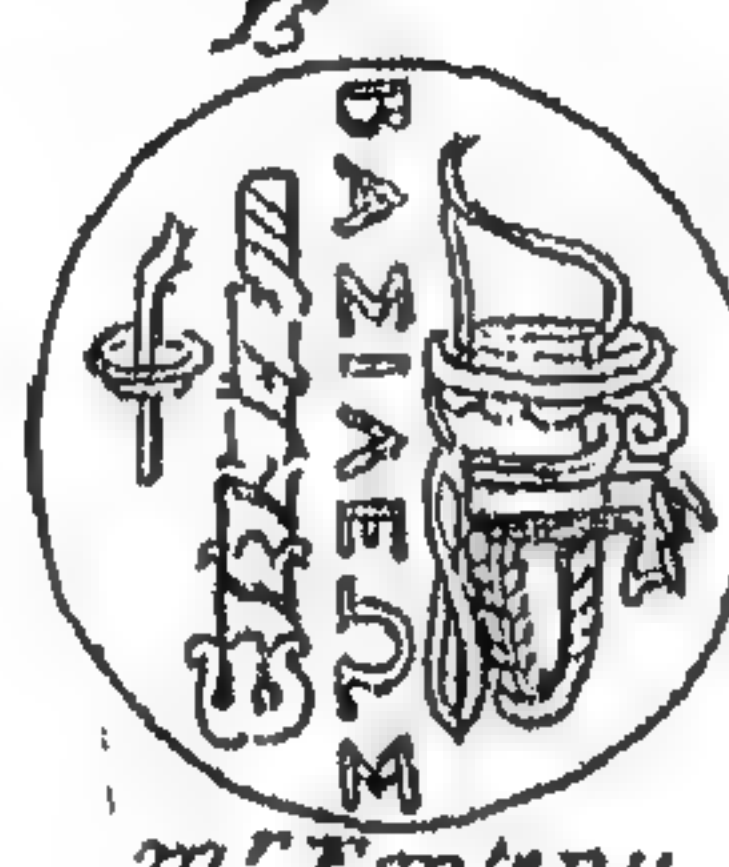
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in that Place where the *Roman* Cavalry are in Pursuit of the *Sarmatick*, where, he says, they are upon the Stone twice as long as those of the Foot. The Measure however may be easily taken by comparing them with the Stature of the Men, especially where there are so many represented. The first Monument in which the *Roman Gladius Hispaniensis* is seen, is *Scipio's* Shield exhibited above, where the Sword is represented as we have been describing it; and where the *Spanish* Sword appears to be exactly the same with that of the *Romans*. The Swords are much the same upon all the Monuments of *Trajan*; and are also of the same Length upon the Column of *Marcus Aurelius*, and the Arch of *Severus*, but a little more pointed. The *Romans* however wore them much shorter in the time of *Constantine* and *Theodosius* the Great, as may be seen in the Column of *Theodosius*, where the Blades appear not to be above eight Inches long.

But some Monuments there are that furnish us with longer Swords: Such, for Instance, are those of *Trajan* and his Company at a Bear-hunting, where the Blades are two Foot long. In sepulchral Monuments also we meet with some that are yet longer: But those of the Legions and Cohorts, which occur upon Columns and Arches, are such as we have been describing, and as are represented in the following Plate; that is, always short, tho' different in length; which agrees with what *Silius Italicus* says, namely that Javelins and short Swords were the fittest for fighting with.

Pila volunt brevibusque habiles mucronibus Enses.

V. The *Parazonium* was a short Sword or Ponyard, which they hung at their Girdle: It frequently occurs in Medals, but the Form of it is not easily distinguishable by reason of the Smallness of the Image.

The *Etruscan* Sword represented in some Monuments, was a little longer than the *Roman* one; as was also that of the *Dacians*, tho' crooked like a Sickle.

Prusias's Sword, the Figure of which is exhibited in the Chapter of the *Grecian* Habits, has a Blade about two Foot long: But a *Greek* standing besides him, whose Figure is half broken, has one yet longer than that; both which are again here exhibited: *Telamon's* Sword represented in the first Plate of this Volume, seems to have been of the same Form with this; tho' part of it only can be seen by reason of its being conceal'd behind that Hero and his Wife. PLATE IX.

The *Amazons* and *Greeks*, who are exhibited hereafter engaging together, are furnish'd with Swords that have very long Blades. We also meet with other Swords upon *Roman* Monuments, the Blades of which are two Foot long. Nor do I remember to have met with any Sword in ancient Monuments, which does not exactly agree with some one of those I have been describing. The Reader need not be told that the Swords of the *Persians* were call'd *Acinaces*, and that of the *Thracians* *Harpe*, the Blade of which made an obtuse Angle, as may be seen in a Monument publish'd by *Boissard*, but more accurately since by *Fabretti*, which we have therefore publish'd after him under the Article of Gladiators.

VI. The Sword taken from the Cabinet of M. *Boisot* the President of *Besangon*, which we have here exhibited, has much the same Form with the *Roman* Swords upon the *Trajan* Column; but the Blade of it is not quite a Foot long. That from the Cabinet of M. *Foucault* has a brass Blade of thirteen Inches long; but is here represented less. The Use of Ponyards, call'd in *Latin*, *Pugiones*, was common at *Rome*; in the number of which I think may be reckon'd a kind of Dagger in the Cabinet of the Abbot *Fauvel*, which I have here represented, together with its Scabbard, adorn'd with Figures: I dare not however affirm that it is of the earliest Antiquity. Another from the same Cabinet, has a long Handle that terminates in the Head of a Ram, tho' the Blade is not above five Inches

- 6 Inches long. A Ponyard from the Cabinet of *Brandeburgh*⁶, publish'd by *Beger*, very much resembles the two Ponyards in the Medal of *Brutus* in the *Junian* Family, where the Inscription *Eidibus Martiis* marks the Murder of *Cæsar*. The Death of that Prince was look'd upon by *Brutus* and other Friends of the Republick, as the Restoration of their Liberties; tho' in Truth it was nothing else than a Change of the Governour. We have added here another *Dacian* Sword,
- 7 crook'd like a Sickle⁷; which seems to be a Foot and a half long, taking it in a right Line from the Handle to the Point.
- 8 VII. We shall conclude this Article of Swords with the Pummel of one⁸, which would be indeed something extraordinary, were the Antiquity of it unquestionable: But of that we cannot pretend to judge, having never seen it: It's adorn'd with Bass-Reliefs, tho' rude enough, and has this Inscription round it in two Circles, which make it appear like Medals: *Carthago duce Hannibale, subacta gladio & virtute Scipionis*. From which Inscription and the Bass-Reliefs the learned Reader will judge whether this Hilt from the Cabinet of M. *Boisot*, President of *Be-sançon*, ought to be look'd upon as antique or not: Those that have seen the Original assure me it is; tho' for my part I cannot perswade my self that it is of the earliest Antiquity, but rather that it is the Work of later Ages.

C H A P. VIII.

- I. *What the Pilum was.* II. *What the Verutum, another kind of Dart.* III. *The Hasta, or Spear, was the same as the Lance.* IV. *What the Hasta pura was.* V. *The Length of the Spears.* VI. *Some extraordinary Spears.* VII. *What the Gælum and Sarrissa were.* VIII. *A singular Spear with two Points.*

I. I Do not know any thing more difficult than to distinguish the *Roman Pilum* from other Darts: For tho' it was certainly different from what they call'd the *Hasta* or *Lances*, yet can we not well find out wherein the Difference in these Weapons consisted; nor do the Monuments afford us any considerable Aid herein. According to *Polybius*, it was a kind of Dart, whose Staff of Wood was near two Cubits long, and about the thickness of a Finger, and the Point a good Palm or nine Inches long, and so fine and sharp withal, that it must necessarily break the first time it was thrown, and be of no farther Use: For had it been stronger it could have been no other than the common Dart, which might have been lanc'd again at those that threw it. In another place *Polybius* distinguishes the *Pilum* into two sorts, saying that some were thicker, and some slenderer; and adds something more concerning their Difference, but in such obscure Terms, that the Commentators can make nothing of it. The first however offer their Conjectures thereupon, and they that come after refute them, and advance new ones of their own; both which, after all, afford but little Satisfaction, so obscure is that Passage of his, and perhaps corrupted. The *Pilum* was most certainly a Dart which the *Roman* Legionaries us'd to throw at the Enemy before they fought with Sword in Hand; tho' sometimes it happen'd thro' their Eagerness to be engaging, that they advanc'd so near the Enemy, that they had neither time nor space to make use of the *Pilum*, but threw it away and betook themselves to their Swords. This *Pilum* the *Greeks* call'd *δοκον*, and ascrib'd the Use of it to the *Romans*. But after all, I no where meet with the Form of this Dart very clearly,

Columns

Columns and triumphal Arches affording nothing that comes near it; and as to Medals, the Images there are so very small, that there's scarce any possibility of distinguishing the *Pilum* from a Spear, if any such thing be there.

The five Points of Spears or Arrows exhibited⁹ here, were publish'd by *Beger*.

M. *Fabretti* is of Opinion, that what *Trajan* holds in his Hand upon the Column, which has something like the Point of a Lance or Spear, on each side, is a *Pilum*. He also gives us the Figure of a Soldier, taken from a Gem in his Cabinet, as we have here represented him¹⁰. This Soldier has a Helmet on, and is naked from Head to Foot: In his left Hand he holds a Trophy that rests upon his Shoulder, and in his right a *Pilum*, pointed like a Spear at each end: He exactly resembles *Mars gradivus*, whom we often see upon Medals. These Darts pointed at each end often occur on antique Monuments and Medals. I do not think, however, that this Dart of *Fabretti's* is certainly the *Pilum*, seeing it has by no means the Form given by *Polybius* above.

II. The *Verutum* also was a kind of Dart, which *Polybius* makes to be three Cubits long: It was four-square, and very much of the shape of a Spit, from whence it borrow'd its Name, *Veru* being the *Latin* Word for a Spit. There was another kind of Dart which they made use of upon occasion to carry Fire in, call'd *Falarica*, which was three Foot long.

III. The *Hasta* was like the *Lancea*, which last Word is by some thought to be *Gaulish*, and by others *Spanish*; but, however that be, was certainly given by both of them to that sort of Spear call'd by the *Romans* *Hasta*. There seems notwithstanding to have been some Difference between these two, because the *Lancea* was darted or thrown like a Javelin or *Pilum*, whereas the Legionaries push'd with the *Hasta* without parting with it out of their Hand. The *Hasta* is thought to have been originally a Weapon of the *Hetruscans*, who call'd it *Coris*; but the *Sabines*, from whom the *Romans* borrow'd it, call'd it *Quiris*; and from thence *Romulus* had the Name of *Quirinus*, and the *Romans* of *Quirites*, because of their making use of the *Quiris* in War. There were two sorts of *Hastæ*, those which the *Velites* and Cavalry made use of, to dart like Javelins, and those us'd by the Foot to push with after the manner the *English* Pike was us'd. There are nevertheless several Passages, where the Cavalry is said to fight with *Hastæ*, without parting with them; from whence one is inclin'd to think they serv'd for both Purposes. The Spears call'd *Amentatæ* were a heavier sort than the rest; and in the middle of them had a piece of Leather fasten'd to put the Finger through, the better to secure the Lance from being wrested out of their Hands. Some Javelins had also their *Amentum* or Thong, to pull them back when they had darted them.

IV. What they call'd the *Hasta pura*, was a sort of Spear or Pike without Point, given as a Mark of Honour to such as had behav'd themselves valiantly; many Examples of which we find in Authors, and yet more in Inscriptions: Sometimes these Gifts were of Silver, as Cardinal *Noris*, in the *Cenotaphia Pisana*, p. 121. proves.

V. The Pikes or Lances which occur in the Monuments of the *Roman* Emperors, are pretty much of the same Length, that is, about six Foot and a half with the Point. But they are more distinctly seen in the Bas-reliefs of *Trajan*, taken from *Constantine's* Arch, where they appear to be something longer, if the Measure is taken from a Comparison of them with the Stature of the Persons that are arm'd with them. The *Herculian* Lances, taken notice of by *Trebellius Pollio*, in his Life of the Emperor *Claudius Gothicus*, were perhaps longer or more adorn'd than other Lances.

VI. There are two Spears in the *Trajan* Column, whose Points are in the Shape of a Half-moon convex: They are in the Hands of those they call'd *Primipili*, who wore upon their Heads Lions Skins. In the time of *Marcus Aurelius*, Spears were not so long; there being a great number upon his Column that exceed not the Stature of the Men. There were others also much shorter, as may be seen sometimes in the Hand of that Emperor; as likewise in *Constantine's* Arch among the Bas-Reliefs of that Emperor. The Spears in the time of *Theodosius* are yet shorter, and seem not to be above four Foot long.

VII. What they call'd *Gesum*, was a light Javelin in use among the *Gauls*; as appears from *Virgil*, who takes notice of their carrying two of these Weapons at a time in their Hand:

*Duo quisque Alpina coruscat
Gesum manu.*

The *Sarissa* of the *Macedonians* was of such a prodigious Length, that one can hardly think how it could be made use of, were not all the Ancients agreed upon this Point. Some Writers make it sixteen Cubits long, which is four and twenty Foot; the Use of which was to keep off the Elephants from pressing in upon them. The *Lacedemonians* also brought them into use, and if we may give Credit to the Emperor *Leo* in his Tacticks, so did the *Romans* too. Nor were the Spears of the *Chalybes* much shorter than those of the *Macedonians*; since, according to *Xenophon*, they were near fifteen Cubits long.

VIII. We have here exhibited the Point of a Lance, publish'd by *Fabretti*¹¹, and another taken from the Cabinet of F. *Kirker*¹². To these we have also added a forked one¹³, taken from the Cabinet of the Abbot *Fauvel*; the Original of which is almost two Foot long. Spear-points of this kind are seldom taken notice of by any Writers, tho' this here has all the Marks of Antiquity that can be desired: Nor is there any other Author besides *Xenophon*, that I know, who mentions the Spear with two Points; but he indeed speaks of it as a Spear the most unmanageable, and the soonest broken. There are, however, various Opinions about the Signification of *δῶρυ καμάκινον*, which is the Term *Xenophon* makes use of: But this *Leunclavius* proves plainly to be a Spear with two Points; which Signification, besides the Testimonies of modern *Greeks* cited by that Author, is farther authoriz'd by *Cyril's* *Lexicon*, and by a MS of the King's cited by M. *du Cange*. Now all these say *καμάξ* and *καμάκιν* signify *fusina*, a Fork; so that *Doru Camacinon* by consequence will signify a forked Spear, or Spear with two Points, such as this is.

C H A P. IX.

I. The Shape of the Grecian Bow. II. Bows of the Barbarians of a different kind. III. The Points of the Arrows made of Bone or Stone. IV. The Use of the Bow among the Romans; V. The Quivers; VI. the Coryti.

I. **T**HE Use of the Bow and Arrow, *Pliny* says, was, according to some, found out by *Scythes* the Son of *Jupiter*, but, as others will have it, by *Perfes* the Son of *Perseus*. *Diodorus Siculus* attributes the Invention of them to *Apollo*, and says that the *Cretans* were the first who made use of them. But all
this

this is fabulous and uncertain, and 'tis without all doubt that they were of the earliest Antiquity. The Figure of the Bow is pretty uniform in the Monuments that remain to us: for it has generally two Inflexions or Bendings, between which, in the place where the Arrow is drawn, is a right Line. The *Grecian* Bow was in the Shape of a Σ , of which Form we meet with many. There were but few Nations that did not make use of the Bow; nevertheless it does not appear that the *Romans* had it in the Infancy of their Republick: They made use of it, however, afterwards, tho' their Archers indeed were for the most part Auxiliaries. And this is what we find remarkable concerning the Bows of other Nations.

II. The *Barbarians*, who, after the Defeat of the younger *Cyrus*, pursued the *Greeks*, commanded by *Chirisophus* and *Xenophon*, had Bows almost three Cubits long, that is, four Foot and a half; which may very well be, seeing some of the Savages of *America* have them five or six Foot long. These Barbarians had also Arrows of two Cubits long, which when they drew, they clapt their left Foot to one of the Extremities of the Bow, and with wonderful Dexterity would in this manner let fly, and pierce the Bucklers and Cuirasses of the Enemy. These Archers were perhaps *Persians*, seeing those, according to *Herodotus*, had very great Bows, and Arrows of Reeds. The *Indians* had also not only Arrows, but Bows also made of the Reeds or Canes of that Country. The *Arabians* had likewise very great Bows; but those of the *Ethiopians*, made of Palm-tree, surpass'd them all in Magnitude: for, according to *Strabo*, they were four Cubits long, and season'd in the Fire before they were us'd: Their Arrows also were proportionably long, and instead of Iron Points, were pointed with sharp Stones of a very hard quality.

The *Lycian* Bows were made of the Cornel-tree, and the Strings of these Oriental Nations, according to *Pliny*, of Camels Pizzles. *Beger* has given us two Points of bearded Arrows, which were in use in early, as well as later Ages: To these he adds three others, which seem to have been the Points of Javelins.

III. Many of the barbarous Nations pointed their Arrows with Bone, instead of Iron. The *Sarmatians*, *Pausanias* says, had no Iron in their Country, and forasmuch as they had no Commerce with other Nations, and therefore did not import any, they pointed their Spears or Lances with Bone, instead of Iron: Their Bows and Arrows were both made of the Cornel-tree, and the last pointed as their Spears were, with Bone. The *Germans*, *Tacitus* says, for want of Iron, pointed their Arrows with Bone; as did also the *Huns*, according to *Ammianus Marcellinus*. One of the most singular and ancient Monuments found about two and twenty Leagues from *Paris* in 1685, a Description of which shall be given in the fifth Volume, furnishes us with something very much to the present purpose: For in that very Place were found certain Bones shap'd like the Points of a Halbard, which had formerly been fix'd to long Staffs, to be us'd as Spears; one of which was made of the Shank of a Horse. Points of Arrows were also found there, some of Ivory, and some of Stone.

IV. Tho' the *Romans* themselves did not make much use of the Bow in their Wars, their Archers being for the most part Auxiliaries, yet were they not ignorant in that kind of Exercise, as has been observ'd of the Emperor *Commodus*, whose Dexterity therein was extraordinary: For they had Masters at *Rome* to teach the Use of it; among whom was *T. Flavius Expeditus*, whose Image *Spon* has given us from a sepulchral Bass-Relief, where he is call'd *Doctor sagittariorum*. He is represented naked down to the Waist¹⁴, with the end of a Bow in his right Hand, the other end resting upon the Ground, and in his left an Arrow: The Bow seems to be three Foot long, and the Arrow a Foot and a half. The Title of *Doctor* occurs likewise in other Exercises: Thus we find in a certain Inscription given by *Fabreti*,

Fabreti, Doctor Thracorum, or Teacher of the *Thracian* Gladiators. This was he that taught the Gladiators the Art of killing at the publick Spectacles. We also meet with the *Doctor secutorum*, another Class of Gladiators, and *Doctor provocatorum*.

V. The Quiver very often occurs in ancient Monuments, and for the most part of the same Form, with this only Difference, that some have no Cover, while others have one that shuts down the Arrows, as if they were in a Box. But these are scatter'd in so great number through the Course of this Work, that we may spare repeating them here.

VI. Besides this Case for their Arrows, they had also another for their Bow, which they call'd *Corytus*, and which is very well represented in a Medal of the 15 Abbot *de Fontenu*, and from him here exhibited ". That learned Abbot has not only been ever ready to communicate to me what he had himself, but also industriously to procure for me elsewhere whatever might contribute to the completing of this Work.

CHAP. X.

I. *The Nations that fought with a Battle-ax. Battle-axes of Stone.* II. *The Sling.* III. *The Nations that excelled in the Use of the Sling.* IV. *The Nations that fought with a Club.*

I. **T**HE Ax was also a military Weapon, and us'd by the *Amazons*, as we have already seen, with two Edges; which is the sort that *Xenophon* calls *Sagaris*, in his fourth Book of the Expedition of *Cyrus*, and says the *Persians* also made use of them. It was likewise in use among the *Ambrones* and *Teutones*, as may be seen in *Plutarch*, who tells us that they had various sorts of them. Among the barbarous Nations some made use of Stone-axes; of which sort about twenty were found under the Bones in a Sepulcher, discover'd two and twenty Leagues from *Paris*, all of a hard quality; one of which was the Stone *Pyrites*; another a precious Stone, call'd *Giadus arcentalis*, and the rest of different sorts, some reddish, and some of a blackish Colour, but all hard. A Piece of a Stag's Horn, found in the same place, had serv'd for the Insertion of one of these Axes, as appears by the Hole, at the other end of which Horn is another Hole, design'd for the Reception of a wooden Handle.

II. The Sling was likewise a military Instrument, and in great Use among many Nations. This, as far as we are able to judge of it from the Slingers in the Column of *Antoninus*, was a long narrow Piece of Leather or other Stuff, the two Ends of which were held in the Hand, and the Stone put in the folding at the bottom, one of the Ends having a Loop for the Finger, that when the Stone was thrown the Sling might not slip out of the Hand. *Servius Tullius*, according to *Dionysius Halicarnassens*, added to the *Roman* Troops certain Soldiers arm'd with Javelins and Slings, who were to fight out of the Ranks: But these *Appius Claudius*, in an Harangue cited by the same Author, look'd upon as of very little Service.

III. The *Baleares* or People of the Isles, known at this Day by the Names of *Majorca* and *Minorca*, were famous for their Skill in slinging; and, according to *Strabo*, had three sorts of Slings, viz. the *Macrocolon* for throwing far, the *Brachycolon* for throwing at a little Distance, and a middle sort between both. These People,

People; he says, took so much Care to bring up their Children in the Exercise of the Sling, that they would not suffer them to eat until they had first hit a Mark. The *Baleares* were often employed both in the *Carthaginian* and *Roman* Armies, and were sometimes of great Service to them, the Victory being in a great measure owing to them. Among the *Greeks*, *Thucydides* says, the *Acar-nanians* excell'd at the Sling. The *Achaians* were also famous at the Sling, which they made of a triple Cord, and threw their Stones with greater Force than the *Baleares*: Nay so dextrous were they at it, that they grew into a Proverb; so that when any one threw a Stone or Dart with Skill and Address, it was call'd *Achaicum telum*. The *Germans* also made use of the Sling, as we have already seen, and shall see again below among those that attack the Emperor *Marcus Aurelius*.

IV. The Club was also a Weapon us'd in War by the *Germans*; as we have seen in the Columns. The *Gauls* likewise us'd a sort of thick short Clubs, if we may give Credit to a Monument found in *Burgundy*, where there is one full of Knots, or else set with Points of Iron: But as it's probable those two Men that are fighting with Clubs, are the *Athletæ* that fought at publick Spectacles, so we have chosen to exhibit them in one of the Chapters of Sports. Of this kind were also the Clubs of the *Ethiopians* in the Army of *Xerxes*, according to *Herodotus*. The Savages of *America* make use of the Club likewise, which they call *Boutou*; which sort of Weapon is not amiss for close Fight, tho' it must be own'd it has its Inconveniencies; for while a Man is heaving his Club to fetch a Blow, he may be run through the Body. We have nevertheless seen the *English* in our Days fight the *Germans* with the Club-end of their Muskets, and beat them with it.

B O O K III.

Concerning the Cavalry of all the known Nations. The Works of the Soldiers, and their military Ensigns.

C H A P. I.

I. The *Greeks* and *Romans* agreed in their manner of Riding. II. A *Roman Horseman*. Who the *Tesserarii* were. III. The Shape of their Bridle, and whether the *Ancients* used Reins. IV. Images of several Horsemen. V. What kind of Bridle the *Lupata fræna* was.

I. **T**HE *Greeks*, who agreed with the *Romans* in the manner of riding on Horseback, as well as in the military Habit and Arms of the Infantry, differ'd very little, if any thing, from them in their Furniture and Accoutrements of their Horses: For what *Xenophon* has said of the Form of the *Greek* Bridle and Halter, is also observable in *Roman* Monuments. *Greek* Horsemen likewise occur upon Medals; but the Smallness of the Field there is such, that all the several Parts of the Image cannot well be distinguish'd. *Roman* Cavaliers, however, are plainly distinguish'd upon their Columns and Arches.

- 16 II. We have here exhibited a Cavalier leading his Horse by the Bridle¹⁶, as M. *Fabreti* publish'd it in his *Trajan* Column. The Horse has a kind of Crescent upon his Breast, which is what frequently occurs among *Roman* Horses. The Cavalier has a Spear in his Hand, and upon his left Side a Sword, the Blade of which is two Foot long: And this agrees with what has been before observ'd, namely, that Horsemen's Swords were longer than those of the Foot. No Bit appears in this Bridle, tho' it's most certain the *Romans* rode their War-Horses always with it: The Fault therefore must be in the Stone, M. *Fabreti* having publish'd the Image as he found it. The Inscription imports that it is the Sepulcher of *Aurelius Saturninus Verissimus*, a Horseman of the eighth *Prætorian* Cohort, who had serv'd five Years in the second *Italian* Legion in quality of *Tesserarius*; that is, who wore those military Marks or Badges call'd *Tesseræ*, which the Officers gave one to another in a kind of Succession. He died at eight and twenty Years of Age, and his Brother *Aurelius Optatianus*, who was also a Cavalier, erected this Monument for him.

D.

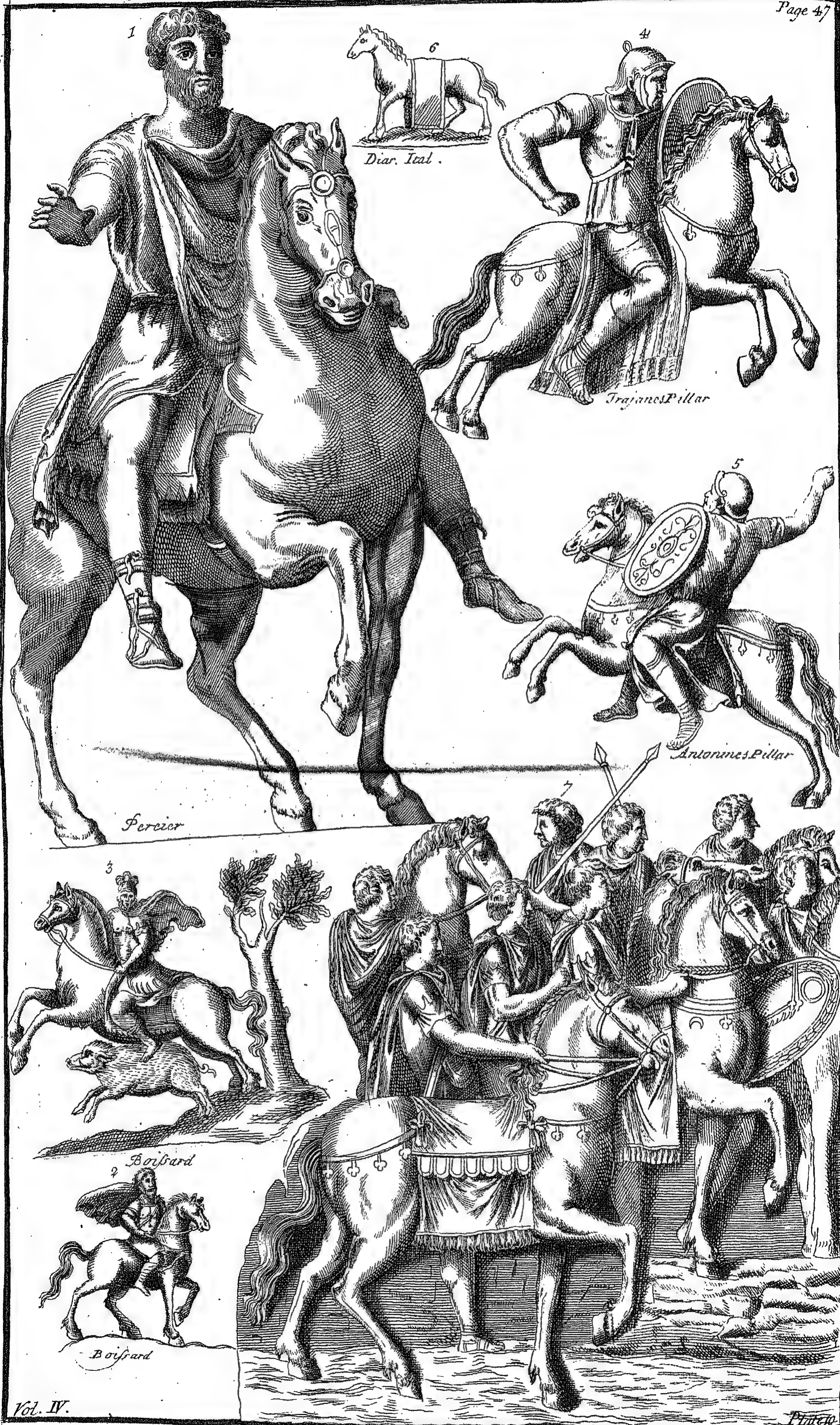
M.

AUR. SATURNINO. EQ. COH. VIII. PR.
 VERISSI. QUI. MILITAVIT. IN LEG. SE
 CUNDA. ITALICA. TESSERARIUS ANN. V.
 QUI VIXIT ANN. XXVIII. AUR. OPTATIANUS
 EQ. FRATRI. BENE MERENTI POSUIT.

- 17 III. The following Horse's Head bridled¹⁷ was also publish'd by the same *Fabreti*, who having thoroughly consider'd the Horses upon the *Trajan* Column, could not but observe the manner of bridling them: And he assures us that they are commonly ~~thus bridled, and that they have a Bit, but no Reins~~, and that not only upon the *Trajan* Column, but upon *Antoninus's* too, and other Marbles; and that whenever they are represented with Reins, it's done without the Authority of Monuments. There are Reins nevertheless upon the Column of *Theodosius*.

- IV. The following Horseman is mounted upon a Horse without either Bridle or
 18 Saddle¹⁸: He is arm'd with a Helmet, a Spear, and a round Shield; but all this may probably be nothing more than a Caprice of the Artificer. The next Cavalier¹⁹, who is fighting with a Foot-Soldier, is arm'd with a Shield and a kind of
 19 Simitar, a Weapon rarely seen in ancient Monuments. The Footman has also such another Simitar, and guards himself with his Shield. The following Image
 20 is an Emperor on Horse-back, crown'd with Laurel²⁰, attacking a Foot-Soldier, and endeavouring to thrust him through with his Spear: The Soldier covers himself with his Shield, and seems to make a Pass with his Sword at the Emperor. The Horse has for a Poitral a Lion's Skin divided into two Parts, and meeting upon his Breast, so that the Mouth of the Lion is seen upon the right and left, probably to terrify the Enemy. There appears here only one of the Sides of the Skin, the Horse being represented in a side View: But the thing is better observ'd in a certain Combat of *Trajan* below, where the Poitral of the Horse is the same.

V. There was also a kind of Bridle call'd *Lupatum frenum*, or rather *lupata frena* in the plural number, which Commentators interpret to be a sort of Bridle with rough Bits resembling the Teeth of a Wolf, which they us'd for hard-mouth'd Horses. Others explain this to be meant of Bridles, which at each end of the Bit on the outside the Horses Mouths had the Head of a Wolf represented; which



which Interpretation seems to agree best with *Ovid*, who calls this sort of Bridle *Lupus*: But neither the one nor the other are satisfactory, but have both their Difficulties: Nor perhaps is it easy to find any other Interpretation.

C H A P. II.

I. A Picture of Alexander the Great on Horseback; of Trajan, and of several others. II. Marcus Aurelius, and other Horsemen. III. Other Horsemen, and a Horse of one of those who are termed *Equites singulares*. IV. A Horse of Trajan, harnessed. V. Horsemen of Theodosius's time. VI. The Horsemen called *Cataphracti*. VII. Others called *Clibanarii*.

I. THE following Figure is *Alexander the Great* upon his *Bucephalus*²¹, as the Inscription denotes, the Letters of which in Greek compose the two first Syllables of his Name *ΒΟΥΚΕ*. The Hero marches towards the Sun-rising, which is represented at the top of the Image; by which is signified the East Country, the Place of his Conquests, where he acquir'd so much Glory; and upon which Account he has in his Hand a Crown of Laurel. The next Horseman is the Emperor *Trajan* upon a Gallop²², concerning whom we have nothing new to observe, except that his Horse has two Crescents upon his Breast. The next is also the Emperor *Trajan*²³ in his Winter Habit, upon a Horse that has no Crupper, which has happen'd, I suppose, either thro' the Carelessness of the Engraver, or of him that first design'd it. Upon both these Horses one may observe, besides the Bridle, a sort of Collar round their Necks; for what Use I know not. The next is a *Roman Horseman*²⁴, taken from the *Trajan Column*, arm'd with an oval Shield, and a Sword now fallen out of his Hand: The Poitral and Crupper of his Horse have some small Ornaments upon them, which may be easily remark'd. The following Horseman upon a Gallop²⁵ was taken from the Column of *Antoninus*: He has a Sword in his Hand, but much less than those of the Cavalry in the *Trajan Column*.

II. The Emperor *Marcus Aurelius* on Horseback was copied from an excellent Statue of that Prince in the Capitol. We have already observ'd in our *Diarium Italicum*, upon the Credit of an anonymous Author of the 13th Century, who related what he saw with his own Eyes, that there was a Captive under the lifted-up Foot of that Prince's Horse, with his Hands tied behind him. This *Equestrian Statue* was erected upon Occasion of some Victory, and the Image here exhibited from the Design that seem'd to us most accurate. The following Horseman with a *Chlamys* floating in the Wind¹ rides upon an uncommon Saddle, probably the Skin of some Animal fasten'd before upon the Horse's Breast, so that it serves at once both for a Saddle and a Poitral. The next Cavalier², who has been in Chase of a Boar, seems to have got him under his Horse's Belly. The Man is remarkable for the Crest in his Helmet, and the Horse for his Mane, which is accommodated in a singular manner.³

III. The following Horseman, taken from *Trajan's Column*, runs full Speed⁴; as does also the next taken from the Column of *Antoninus*⁵. We exhibit here Images of Horsemen of all sorts, that the Reader may the better observe the manner of riding among the ancient *Romans*. To these we have also added the Figure

PLATE
X.

6 gure of a Horse ⁶ which belong'd to the *Equites singulares*, as they call'd them, whose Saddle reaches down on both sides almost to the Ground. These *Equites singulares* had their Station in all Engagements at the Emperor's left Hand, and the *Prætorians* at his right; so that the first stood only in the second Post of Honour: They had likewise their particular Ensign or Cornet; as appears from an Epitaph upon one of them in our *Diarium Italicum*, where he is call'd *Equitibus singularibus signifer*.

7 IV. In the following Company ⁷ are exhibited some Horses harness'd; among others one of the Emperor *Trajan's*, which is represented in a side View so entire, that all the Harness may be easily discern'd, as the Bridle, the Bit, the double Cord that goes from the Bit to the Saddle, the Poitral with its Ornaments, the Saddle, which seems to have no stuffing, and the Crupper, which is adorn'd in the same manner as the Poitral.

PLATE V. The two first Horsemen in the following Plate, taken from the Column of XI. *Theodosius at Constantinople*¹, are thought to be the Emperors *Gratian* and *Theodosius*, who are hardly distinguishable one from the other: They wear the *Roman* military Habit, little different from those we have seen above. Their Helmet has a large Crest with a Bird underneath, and their Swords are shorter than any we have yet seen. The Horses have scaly Housings on, that cover them all over, except the Head and Neck. The Saddles are not unlike our modern ones, and have a Pommel like ours, which inclines one to think that the Inside is a wooden Machine also as ours are. The Dress of the Emperors Legs is remarkable, their Toes appearing very distinctly, which confirms me in the Opinion advanced before; namely that it was adjusted to their Feet, as a Pair of Gloves are to the Hands: The next Horseman ² has a Saddle yet more like ours; but his Sword, if compar'd with his Stature, does not appear to have a Blade above seven Inches long. The Man that accompanies him on Foot, is arm'd with a Club.

VI. The Horsemen call'd *Cataphracti*, who were all over arm'd from top to Toe, were, according to *Servius*, arm'd with Iron, and their Horses with the same; or as *Sallust* says, the Horses were cover'd with Linnen full of Iron Plates dispos'd like Feathers. *Livy* speaks of these *Cataphracti*, which shews that the Cavalry of that sort was ancient: Nay, they were look'd upon as the Strength of the Army.

VII. In the time of the Emperor *Constantius*, there were some of these Horsemen in the *Roman* Army, call'd *Cataphracti*, arm'd from Head to Foot; which sort of Cavalry, according to *Ammianus Marcellinus*, the *Persians* call'd *Clibanarii*. They wore Cuirasses and several Iron Belts; so that a Man would take them, says the same *Marcellinus*, for Statues made by the celebrated *Praxiteles*, rather than for living Men; their Bodies were surrounded with thin Iron Plates, which cover'd all the Members, and so nicely adjusted that whatever their Movements were, this military Habit preserv'd always the same grace, so curiously were the Joynings fitted.

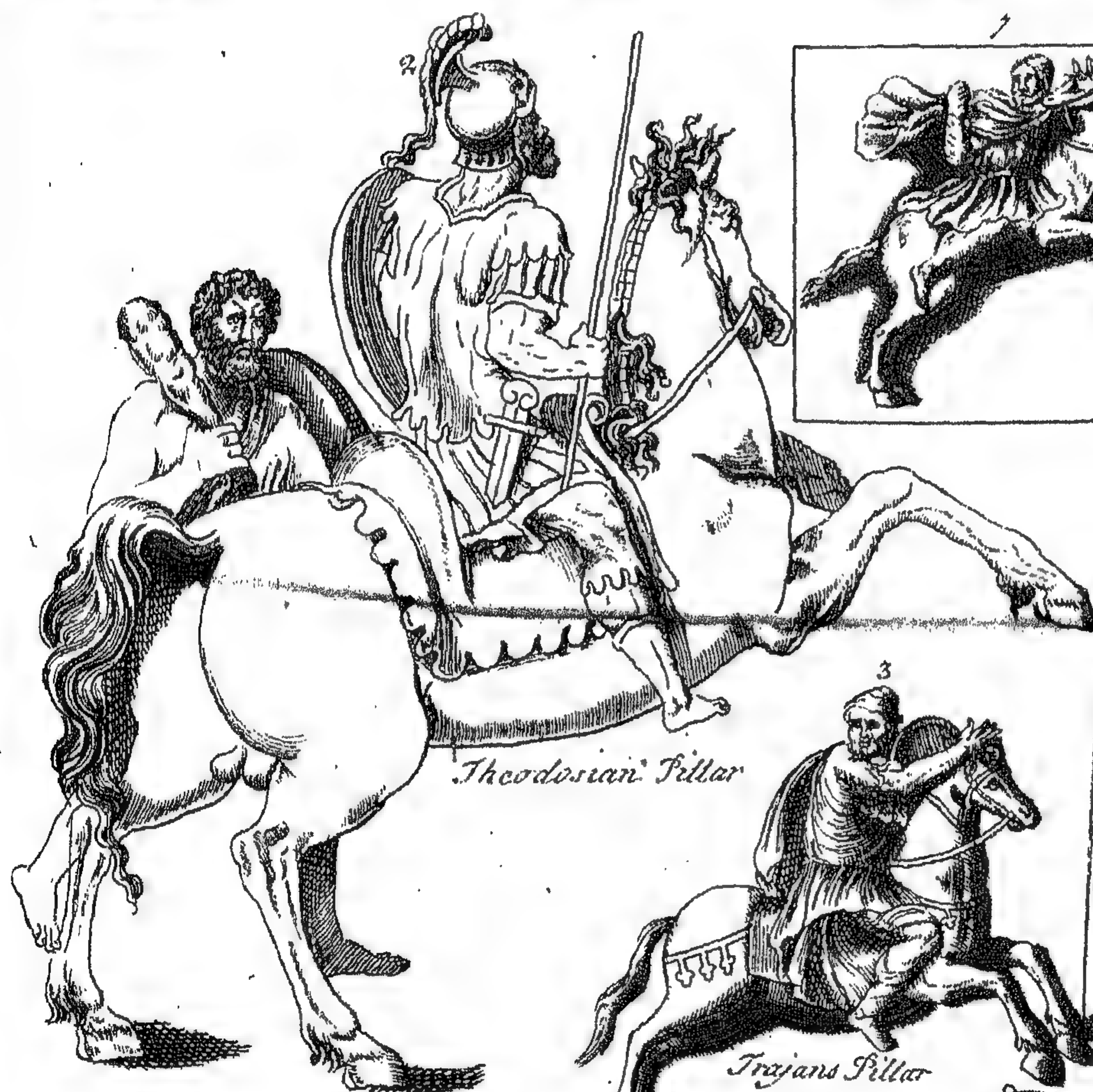




Theodosian Pillar



Theodosian Pillar



Theodosian Pillar



Roger



Trajan's Pillar



Antonine Pillar



Antonine Pillar



Antonine Pillar



Trajan's Pillar

C H A P. III.

I. The Use of Stirrups not known to the Ancients. Names given to Stirrups in the later Ages. II. St. Jerom cited wrong, for Stirrups: a false Inscription upon this Subject. III. The manner of mounting on Horseback, according to Xenophon. IV. How the Romans learnt to mount on Horseback. V. Remarks upon the Horses Shoes.

I. **A**MONG all the Figures of Horsemen we have produc'd, we nowhere find them riding with Stirrups; neither indeed could we expect it, seeing in those early Days the Use of them was not known. But besides the Proofs of this taken from ancient Monuments of different Ages, where nothing thereof occurs, tho' there be several hundreds of Horsemen upon the Columns, Arches and other great Monuments, where the Figures are of such a Magnitude that the most minute things are plainly distinguishable: Besides these Proofs, I say, which of themselves are sufficient, there is yet another taken from the Silence of Authors, both *Greek* and *Latin*, who in no place have ever made the least mention of Stirrups: Nay the very Lexicographers and Writers of Vocabularies among the Ancients are wholly silent hereupon. Now it could never happen that a thing so much in use as Stirrups have been, ever since they have been known, should pass unobserv'd by all sorts of Writers, or unrepresented upon ancient Monuments, where such Numbers of Horses harness'd are exhibited. As to the Words *Stapes*, *Stapeda*, *Stapia* and *Bistapia* us'd in later Ages, they were without all doubt invented after the Use of Stirrups was introduc'd. *Vossius*, who attributes to *Franciscus Philelphus* the Invention of the Word *Stapeda*, to signify Stirrup, seems to be mistaken, especially if he imagin'd that all those Words, which seem to be nothing else than a Corruption of one another, namely *Stapes*, *Stapia*, *Staffa* and *Staphia*, were not in use before his time. *M. du Cange* produces many Examples, where *Staffa* and *Staphæ* are taken for Stirrups, and that from the eleventh down to the fourteenth Century.

II. He that cited *S. Jerom* for the Word *Bistapia*, express'd himself with prudent Caution: His Words are these; *If my Memory do not deceive me, S. Jerom in his Epistles says that he receiv'd certain Letters just when he was going to get up on Horseback, and when one Foot was in the Stirrup, in Bistapia.* But forasmuch as no one but this Author ever met with that Passage in *S. Jerom*, and he himself only cites it uncertainly, there is reason to suspect he had read it in some modern Author, whom he afterwards imagin'd was *S. Jerom*. There is, however, a *Roman* Epitaph produc'd to prove the Antiquity of Stirrups, in Memory of a Man, who, having got his Foot into the Stirrup as he was mounting on Horseback, was run away with by his Horse and dragg'd to Death. The Beginning of the Inscription is thus read in *Apian* and *Gruter*:

D.

M.

QUISQUIS LECTURUS ACCEDIS

But the latter end of it thus:

DUM... PLACERE CUPEREM CASU DESILIENS
PES HÆSIT STAPIÆ, TRACTUS INTERII
IN REM TUAM MATURE PROPERA. VALE.

which Inscription all the Learned at this Day agree is either modern or supposititious. The Use of Stirrups was therefore unknown to the Ancients.

III. *Xenophon*, who teaches the Art of getting on Horseback, says that the Horseman ought to lay hold of the Mane with his right Hand together with the Reins, that in leaping up he may not check the Horse by a sudden Jirk of the Bridle. He teaches also to mount on both sides the Horse: and that when the Rider happen'd to be too heavy, the Groom should help him up after the manner of the *Persians*. He likewise adds, that some Grooms had the Art of making the Horses go down on their Knees to take up their Master.

IV. But the *Romans* had another way of training their Youth to mount a Horse, which was this: They caus'd wooden Horses to be made for their Youth to practise upon, which they first did unarm'd, and that on both sides, until they could do it with Dexterity, and it was equal to them which side they mounted upon; which done, they were taught to mount in their military Accoutrements, and their Sword or Spear in their Hand. Now all this must needs be very difficult, being done without the help of Stirrups; nevertheless it was reckon'd a great Dishonour to a *Roman* Youth not to be Master of this Art of mounting. When they grew into Years, however, they most certainly had the Assistance of their Grooms or other Servants, if they kept any, or else took the Advantage of higher Ground, or of some Stone, or other Convenience. But after all it's something strange that such useful things as Stirrups, which seem so easy to have been invented, should yet never have been hit upon in that Age when all Arts and Sciences flourish'd and were in Perfection, and which our modern Artificers can hardly arrive at. But this will appear less strange, when it's consider'd that many other Usages, the Invention of which seems as easy as that of Stirrups, were equally unknown to them. For what can be imagin'd easier, than for those People, who had the Art of making Glass-bottles and other Vases, to have made Glass-Windows also? Yet none of the Ancients, whether *Greeks* or *Romans*, ever found out this Art, as all Antiquaries to this Day believe; no not in those Ages when all Arts were in Perfection among them. For the People of Quality made use of Tables of Stone for that purpose, that were transparent as Alabaster; and the common People of Linnen Cloth, or else of nothing at all. Thus this very useful Invention was hid from those two ancient Nations, which our most celebrated Artificers make the Patterns of polite Arts, and reserv'd to be discover'd in Ages of Barbarism, as well as that of Spectacles, the Telescope, the Compass, and many other things.

V. The Use of shoeing Horses is very ancient, altho' there be certain Proofs that it was not general among the *Romans*. *Fabretti* says, that among the great number of Horses which occur in ancient Monuments, he never saw more than one that was shod, tho' he made it his Business to examine them all, both upon Columns and other Marbles. As to Mules, both Male and Female, they are often said by Writers to have been shod. Among others, *Suetonius*, in the Life of *Nero*, says, that that Prince never took a Journey accompanied with less than a thousand Waggons, the Mules in which were shod with Silver; and in the Life of *Vespasian*, that a Mule-Driver alighted from his Mules to get them shod. *Pliny* also says, that in his time *Poppea*, the Wife of *Nero*, caus'd her Mules to be shod with Gold: And *Catullus* compares a careless negligent Man to a Mule, whose Shoes were so stuck in the Clay that he cannot withdraw them.

*Et supinam animam gravi derelinquere coeno,
Ferream ut soleam tenaci in voragine mula.*

Xenophon, in his Book of Horses and Cavalry, speaks not one Word of the Custom of Shoeing of Horses; but teaches the Art of hardening their Hoofs, which seems rather to suppose that Shoes were not then in use. The same Author says in his fourth Book of the Expedition of *Cyrus* the Younger, that a certain Nation, whose Horses were very small, used to tye up their Feet in Bags, to prevent their sinking to the Belly in the Snow. There are nevertheless certain and undoubted Proofs that the Ancients shod their Horses: Thus much *Homer* and *Appian* say; tho' it does not appear indeed that the Custom was general.

C H A P. IV.

I. The Cavalry of other Nations; and first of the Persians. II. A Figure of a Parthian Horseman. III. The Cavalry of the Massagetæ. IV. Of the Scythians. V. An Amazon represented on Horseback. VI. A Scythian Horse-Officer.

I. **W**E come now to treat of the Cavalry of other Nations, as we find it in Authors, and antique Monuments. In the Army of *Cyrus* the Younger, who made War upon his Brother *Artaxerxes*, that Prince had about him (according to *Xenophon*) six hundred Horsemen arm'd with large Cuirasses, Cuisses and Helmets; whereas the other *Persians* on the contrary engag'd bare-headed. All the Horses too of this Army had Iron Armour upon their Head and Breast.

II. In the Arch of *Septimius Severus* there are *Parthian* Horsemen seen, with their *Tiaræ* upon their Heads, that bend forward from behind, after the manner of the *Phrygian* Bonnets; and habited in Tunicks, which reach not so low as the Knee, girt about the middle: Their Cloaks are likewise short, and fasten'd before upon the Breast, but float behind at the pleasure of the Wind: They wear a sort of Breeches, by *Strabo* call'd *Anaxarydes*, which fall down to the Ankles, and fasten above the Shoe like Linnen Spatterdashs. By this Image³ it appears, and much better by others in the same Arch, that the Cavaliers in their Flight embrace the Necks of their Horses; which Custom is also observable in certain *German* Nations, as shall be taken notice of below. These *Parthian* Cavaliers flying seem to have no Arms, the Reason of which is probably, that in the Monuments of this kind, that is, Arches and Columns, the Arms which projected out from the Bas-Relief have by various Accidents been broken off and lost. We see however in this Arch, that the *Parthians* had longer Swords than the *Romans*; and learn elsewhere that they fought on Horse-back with the Bow, at which Weapon they were very dextrous; that their manner was to fight flying, that they wou'd return upon the Enemy when they were thought to be routed, and that they sometimes obtain'd considerable Victories over the *Romans*. The *Dacian* Horsemen were equipp'd, as we shall see below, pretty much like the *Parthians*.

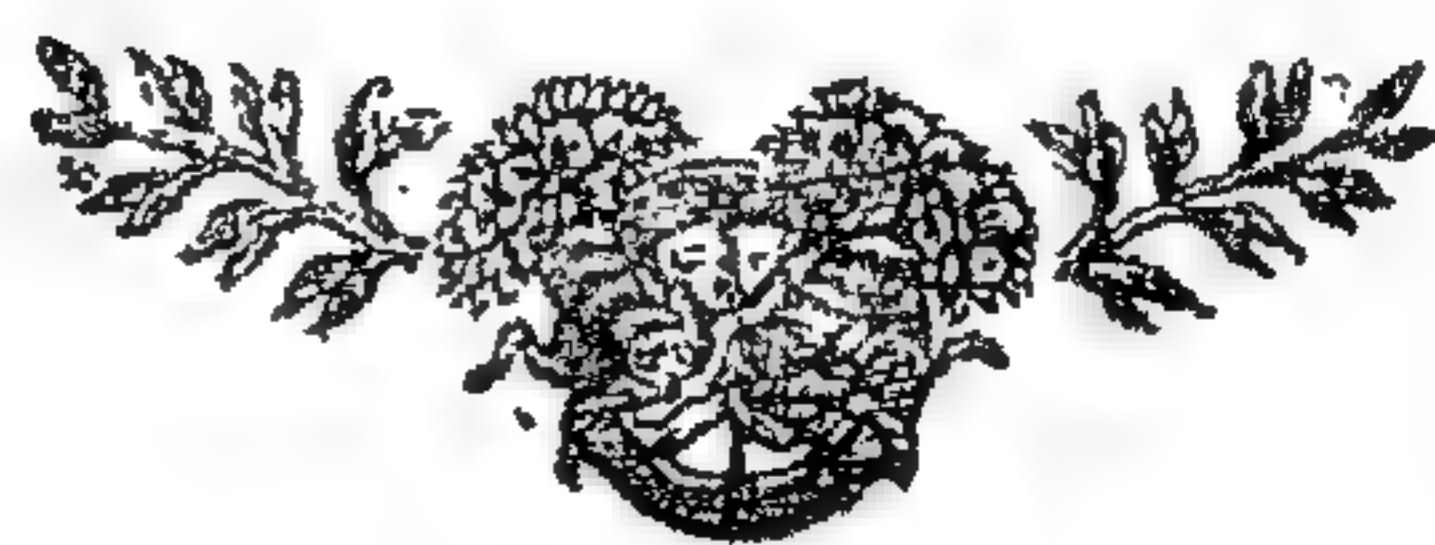
III. The *Massagetæ*, (*Herodotus* says) liv'd after the manner of the *Scythians*; fought both on Foot and on Horse-back; were arm'd with Bows and Pikes, as also with *Sagares* or two-edg'd Axes, for such were the *Sagares*, as we have shewn from a Passage in *Xenophon*: They made use of Gold and Brass in all their Arms

Arms and Accoutrements; the last for their two-edg'd Axes, and to point their Spears and Arrows with; and the first to adorn their Heads, Girdles, and other Parts with: They also put Breast-plates of Brass upon their Horses, and adorn'd the Bridles with Gold. In short, they had Gold and Brass in great abundance, but for Silver and Iron they had none.

IV. The *Scythians* were very strong in Cavalry, and their Arms were Bows Arrows: The manner of their making War was much the same as the and *Parthians*. We have no Monument left where the *Scythian* Cavalry is represented, unless we take the *Sarmatians* below for *Scythians*: For so they may be reckon'd, after the manner of the ancient *Greeks*, who call'd the most Northern People indifferently *Scythians*; the Western, *Celtæ*; the Southern, *Ethiopians*; and those of the East, *Indians*. There are however certain Horsemen upon the *Theodosian* Column, mounted on Horses elegantly harness'd, which they who publish'd that Column, take for *Scythian* Noblemen; which if they really are, they are very much chang'd from the Simplicity of the ancient *Scythians*, who it's probable appear'd in no such Grandeur in the earliest Ages. But tho' we dare not affirm them to be *Scythians*, yet we have reason to suppose them a Neighbouring People to that Nation, the Nobility of which as well as the Commonalty are exhibited on this Column.

V. The *Amazons* were a Nation of Women train'd up to War, and Neighbours to the *Scythians*, according to *Herodotus*, and many other Writers. The History of them is what every body knows; as how they made War first upon the *Scythians*, and then upon the *Athenians*, whose Country they invaded; afterwards their assisting the *Scythians*, and surrendering themselves at last to *Alexander* the Great, together with their Queen. But forasmuch as all this is by many look'd upon as fabulous, and the very Existence of such a People call'd in question by some, we shall dwell no longer upon their Story, but proceed to what is more immediately our Province. We therefore present the Reader with
4 the Figure of *Hippolyta* the *Amazon*, 'flying before *Theseus*, who, after some Pursuit, takes her. She had probably in her right Hand a two-edg'd Ax, the ordinary Weapon of the *Amazons*; but it's now broken off, and nothing remaining but part of the Shaft: Her Shield, which is in the Form of a half Moon, was the proper Shield of the *Amazons*; but something different from the *Peltæ* represented above. Tho' it is commonly said of the *Amazons*, that they burnt the right Breast off in their Infancy, that it might not hinder their Use of the Bow, yet in this Figure she seems to have both Breasts, as well as in all the rest of the Figures I have ever met with. We shall exhibit hereafter two Battels of the *Amazons*.

5 VI. The Horseman 'underneath the *Amazon* is thought to be some Prince or Officer of the *Scythians*. He has on a long hairy Cloak or *Pallium*, and holds a Scepter, which inclines one to think he may be a King of some *Scythian* Nation. His Horse is harness'd pretty much like that of *Theodosius* above, and the Bridle has Reins and Bits after the manner of the Bridles of this Day.



C H A P. V.

I. *The singular military Habit of the Sarmatian Horsemen.* II. *A fine Passage of Pausanias upon this Subject.* III. *They used Bone instead of Iron to point their Spears with.* IV. *Another Passage of Ammianus Marcellinus upon the military Habit of the Sarmatians.*

I. **T**HE following Horseman 'is a *Sarmatian*; of which Nation the *Dacians* had many auxiliary Forces against the Emperor *Trajan* and the *Romans*. Nothing is more extraordinary than their Figure: For their Bonnet pretty much resembles a *Tiara*; and the whole Habit is so adjusted to the Body from Head to Foot, that were it not for the Diversity of Colours observable down to the very Fingers Ends, and to the Extremities of the Toes, one wou'd be apt to take them for naked Men: But what's yet more surprising is, that the Horse is habited in the same manner even to the Hoof and Nostrils, and the Habit so nicely adjusted, that the Motions of the Body are plainly distinguish'd. In short, one wou'd be tempted to think that both Man and Horse were naked, and painted with various Colours like the ancient *Picts*, were not the Tail enclos'd in a kind of Bag, which seems fasten'd to the Harness.

II. There is a Passage in *Pausanias* which admirably well explains this Habit of Man and Horse, and proves at the same time that this same Cavalier is a *Sarmatian*: 'Tis in his *Atticks*, where speaking of the Temple of *Esculapius*, he thus expresses himself: 'Among other things there is a *Sarmatian* Cuirass, or Coat of Mail, which, for the Work of it, shews that these *Barbarians* are not inferior to the *Greeks* in their Skill in Arts. They have no Iron in their Country, neither do they import any from any other Nation, they having no Commerce with the People about them.

III. 'For want of Iron, they make use of Bones to point their Spears with. Their Arrows they also point with the same, which together with their Bows are made of the Wood of the *Cornel* Tree. They have a way of throwing Chains or Nets at the Enemy, and then turning their Horses pull them down. There is no Division of their Country among private Persons, but all is open, and nothing but one entire Forest, and the Inhabitants a sort of *Nomades*, or Shepherds, who have no fix'd Habitation. They have great Breeds of Horses, which they make use of, not only in War, but for Sacrifices also, and even for Food too; and from these it is that they are furnish'd with matter to make their Cuirasses: the manner of making them was very singular, which was this: They take the Hoofs of their Horses, which they first cleanse and polish, and then cut in little Pieces like Dragons Scales; which done, they bore the Scales, and afterwards sew them together with the Sinews of an Ox or Horse. If any of my Readers have not seen Dragons Scales, he will better comprehend the thing, when he is told that they resemble the Divisions in a Pine Apple when it's green. Thus they make their Cuirasses, which for Beauty and Strength are not inferior to those of the *Greeks*: For they very well sustain both distant and close Blows; whereas the Cuirasses made of Linnen are not so sure, nor proof against Iron: The linnen ones are indeed commodious for Hunters, as being what Lions and Leopards cannot enter with their Teeth.

IV. Thus have I given the Reader a Description of those *Sarmatian* Horsemen upon the *Trajan* Column; and the Account of their variegated Habit which reach'd from Head to Foot, as *Pausanias* describes it. The Horses in this

Column are altogether elegant, but have neither Saddle nor Crupper upon them. *Ammianus Marcellinus* says also that the *Sarmatians* and *Quadians* have Cuirasses of Horn, smooth'd and polish'd, resembling Feathers or Scales, and set in Linen Habits. *Fabreti* adds that those Scales in the Column cover the very Joints of the Fingers.

C H A P. VI.

I. The Cavalry of the Daci. II. The German Cavalry differ'd among themselves in their Habit. III. The Cavalry of the Mauri. IV. Their Habit.

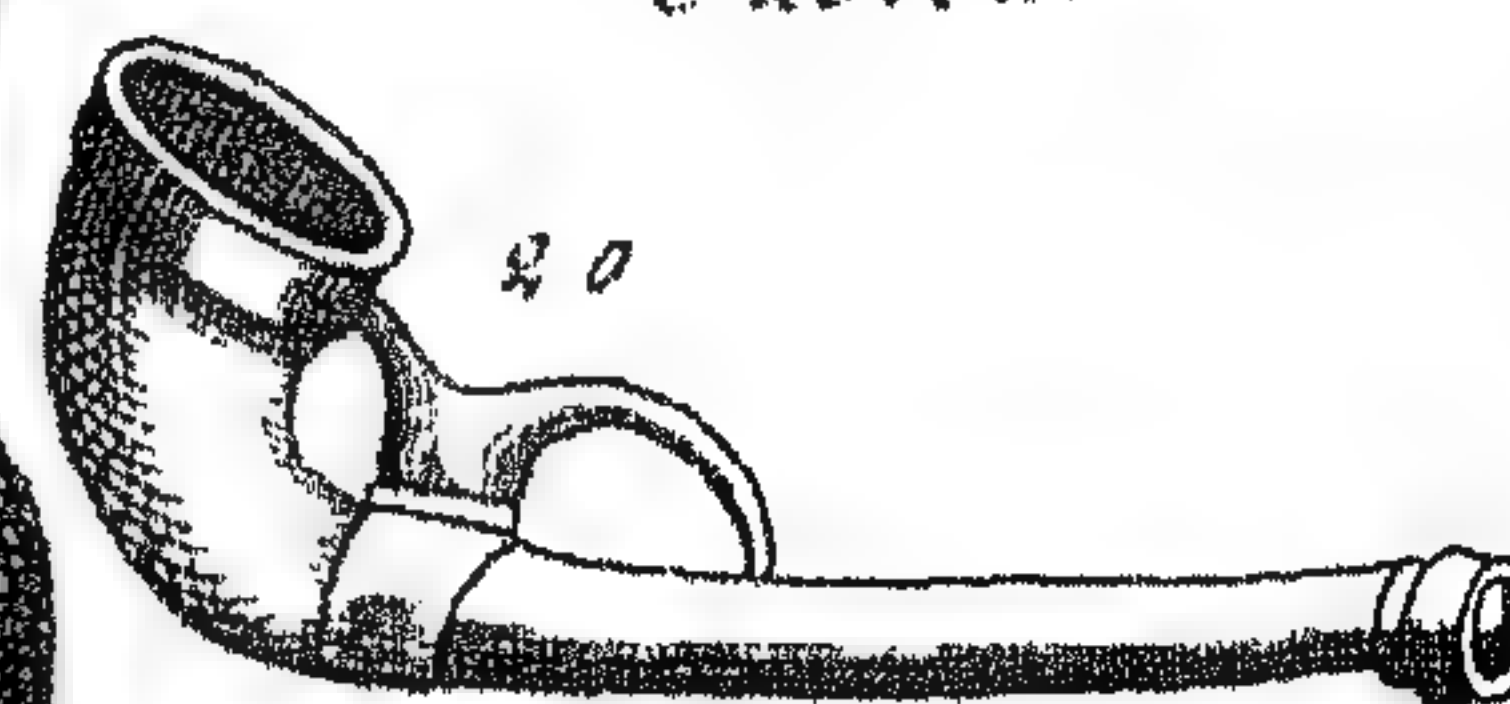
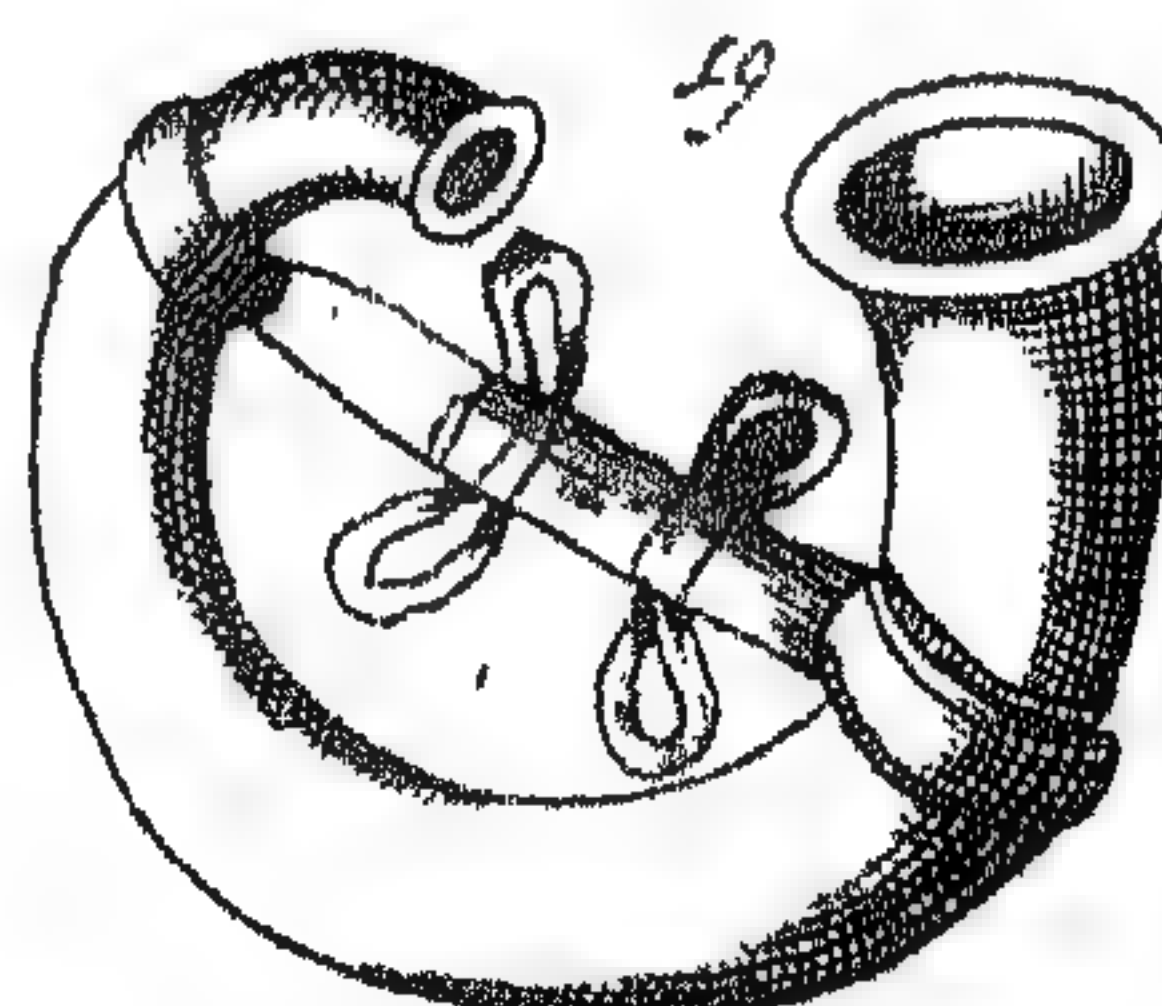
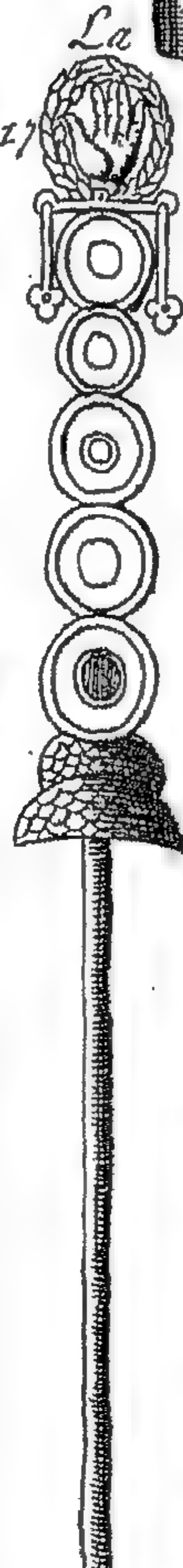
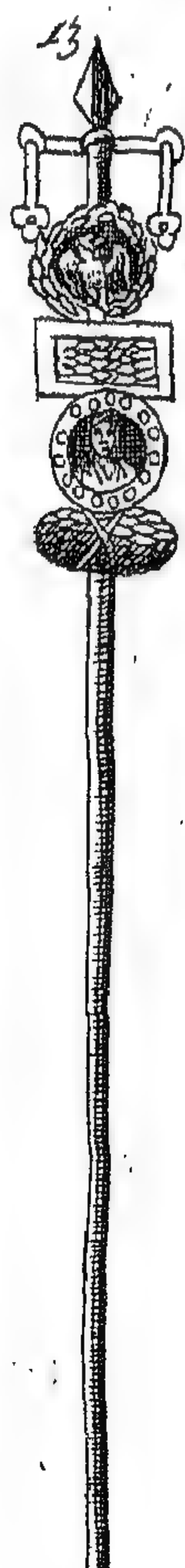
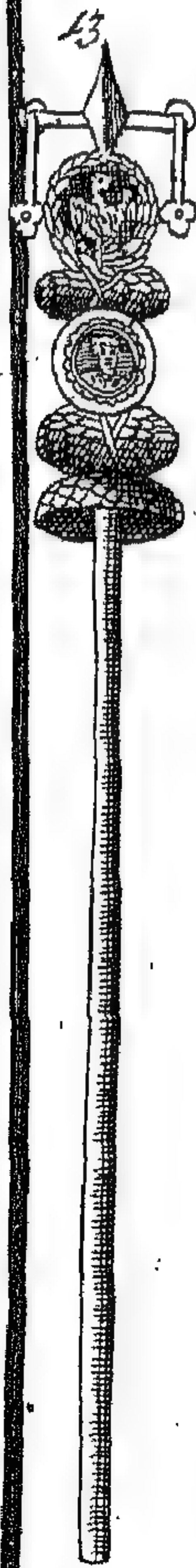
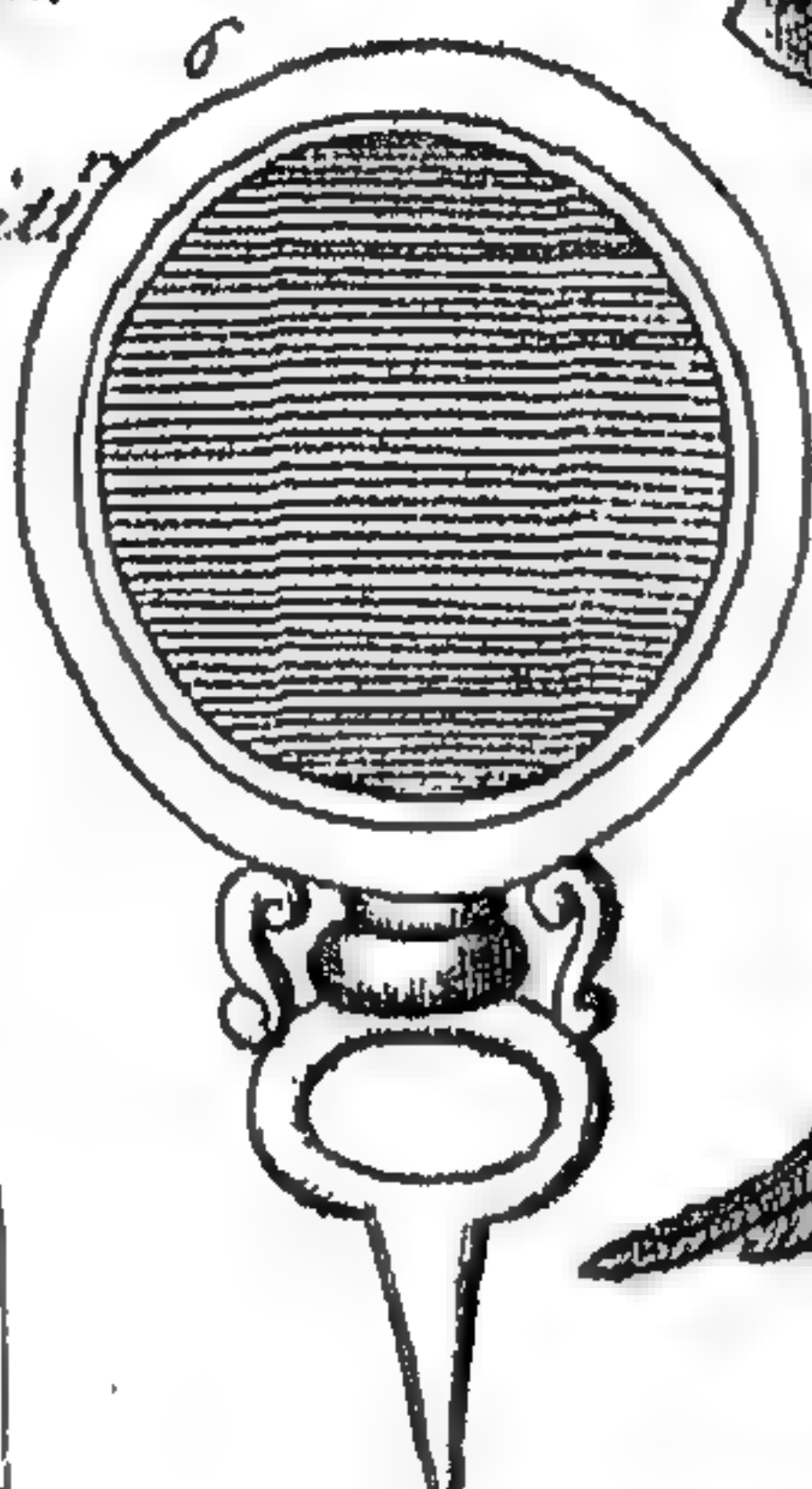
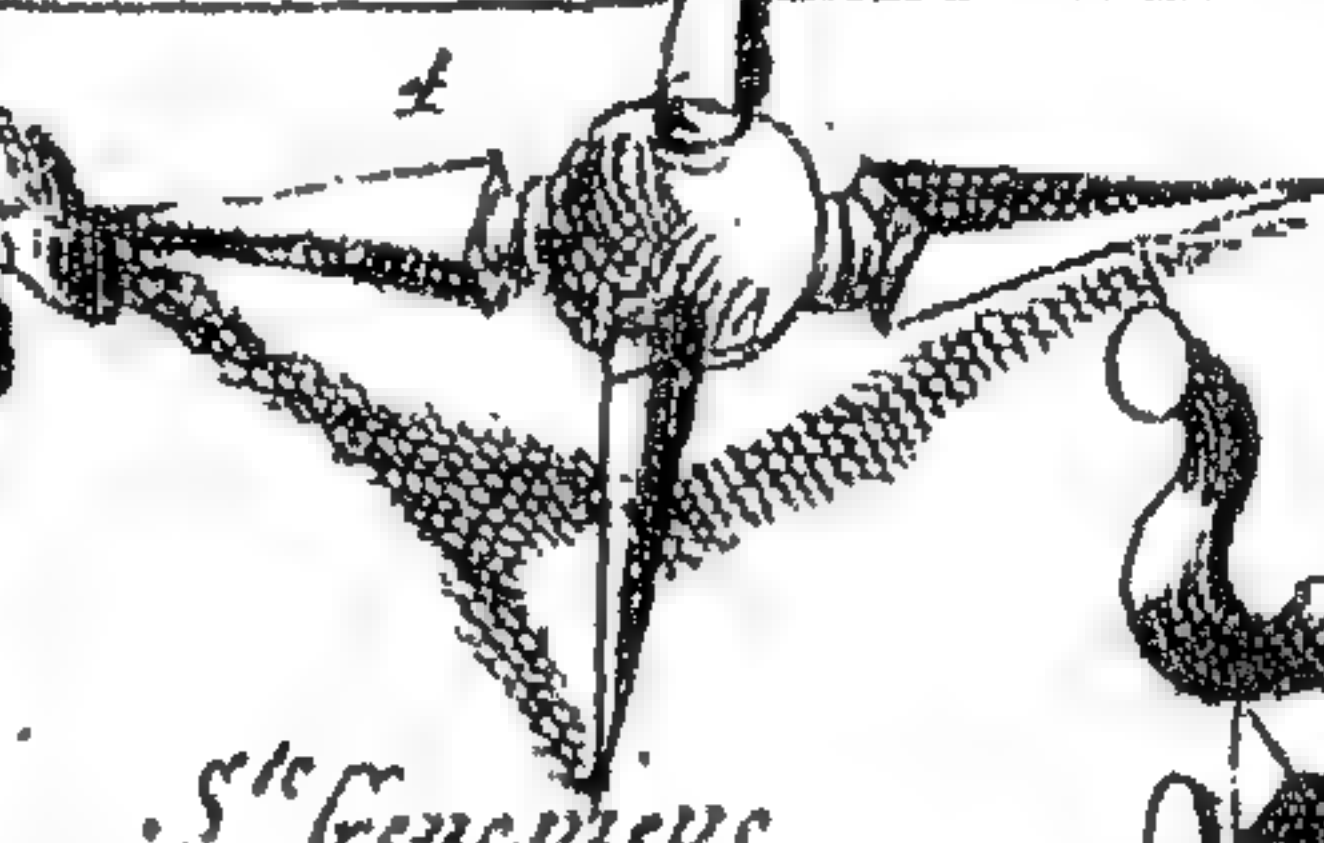
I. **T**HE Cavalry of the *Daci* was habited, as we have already said, much in the same manner with that of the *Parthians*: Their Bonnet bended forward from behind after the manner of the *Phrygian Tiara*, tho' it was not always of the same Form; nay sometimes we meet with the *Daci* bare-headed. Their Tunick reach'd down to the Knee, above which they wore a short Cloak fasten'd before, and floating behind with the Winds, but in cold Weather wrapp'd close round them. They also wore Breeches, which serv'd at the same time for Stockings, and were fasten'd at the Ankles like Spatter-dashes. Their Shoes were close on all sides. Their Arms were a Sword of a moderate length, but crooked like a Sickle, and an oval Shield. The Harness of their Horses was a Bridle, a Poitral and a Crupper; most of them having no Saddle.

II. The *German Cavalry* was habited various ways: For some we meet with
 7 that are naked down to the Waste, and wear upon their naked Shoulders a short Cloak ~~fasten'd before~~, but floating behind: They have Breeches on indeed like those of the *Daci* just mention'd. Others, and those not a few, are habited exactly like the *Daci*, and arm'd also with an oval Shield. But as *Germany* was divided into several distinct Nations, independent of each other, so we need not wonder at this diversity of Habit. Some again we meet with, who have the crooked Sword like that of the *Daci*; and amongst the *German Foot* many occur habited exactly like the *Daci*, without the least Difference. Sometimes also we find among the *Roman Legions German Mercenaries*, who fight for Pay against their own Country: These carry a Half-pike, and are habited like the *Daci*. Their Horses have neither Saddle, Poitral, or Crupper, but Bridle only; and some of them have not that neither. The Riders, when they gallop, clasp
 8 their Arms about the Necks of their Horses, who are taught to hold up their Heads as they run. We here present you with two *German Horses*,⁹ one of which has a Bridle and the other none.

9 The two Horses at the bottom of the Plate⁹ are thought to belong to some King of the *Quadi*, or some other *German Nation*, who came to parley with *Marcus Aurelius*: They have both little Saddles, not unlike some of this time.

Notwithstanding all the Search I have made, I have never yet met with any Monument of the *Gaulish Cavalry*, of so great Esteem formerly, and of so great Service to *Cesar* in his War with *Pompey*, and afterwards with those of his Party in *Africa*. Neither have I found any of the *Spanish Cavalry* that were in the Service of *Cesar* in the same Wars. *Strabo* says it was a Custom with the *Spaniards* to ride two together upon the same Horse, and that upon any Engagement one of them dismounted and fought on Foot: He also adds that they were not the only People that had this Usage.

III. The



III. The Cavalry of the *Mauri* is also represented upon the *Trajan* Column, as *M. Fabreti* has very well observ'd: It was brought into *Trajan's* Service, as *Dio* tells us in a certain Fragment preserv'd by *Valesius*, by *Lusius Quietus Maurus*. The Passage is this: ' *Quietus* commanded one of the Wings of the *Maurish* Cavalry, but was a Man of so infamous a Character, that he was detested and broke: He retriev'd his Honour, however, in some measure afterwards; for when *Trajan* in his War with the *Daci* had Occasion for the Cavalry of the *Mauri*, he brought him voluntarily several Squadrons, and did him signal Service in that War, behaving himself bravely and valiantly, in recompence of which the Emperor loaded him with Honours and Presents: He also did him more signal Service in his second War with the *Daci*.' The Cavalry of the *Mauri* was therefore in *Dacia* with *Trajan*, and this, in all Probability, it is that we see upon that Prince's Column; one of whom we have here exhibited, and below, all the rest of them represented upon the Column. The *Mauri* are pretty well known by their curl'd Hair, and combed Beards; the first of which is observable upon a Medal of *Juba* King of *Mauritania*. The *Mauri*, according to *Strabo*, curl'd their Hair, and comb'd their Beards, wore Gold upon their Habits, clean'd their Teeth, and cut their Nails; and seldom touch'd one another, when they walk'd together, for fear of discomposing their Locks. Another Proof that these are *Maurish* Horsemen, is, that after the manner of the *Numidians*, *Getulians*, and other *African* Nations, they have neither Bridle, Poitral, nor Saddle. The *Numidians* are by Writers call'd *Gens inscia freni*, a Nation ignorant of the Bridle; which is what *Oppian* says of all the *Africans* in general. *Appian* also says that *Massinissa* mounted a naked Horse after the manner of the *Numidians*. We have already seen *Sarmatians* and others on Horseback without either Saddle or Crupper. The *Romans* too, according to *Dio*, had none anciently, and began only in *Nero's* time to bring Saddles into use; but that ought to be understood of a particular sort of Saddles, for they certainly had Saddles before that time: For so *Virgil*, speaking of the *Trojans* in *Æneas's* time, gives us to understand: *Æneid. lib. 7. ver. 275.*

*Omnibus extemplo Teucris jubet ordine duci
Instratos ostro alipedes, pictisque tapetis
Aurea pectoribus dimissa monilia pendent.*

Each of the *Mauri* has about his Horse's Neck a Cord twice round, which *Strabo* says is all they had for a Bridle, *χοινοχαλίνους χρώμενοι τοῖς ἵπποις*, tho' others read *χοινομάλοις*. This Cord, however, as it is here exhibited¹, is at the bottom of the Neck, the Head of the Horse being under no Restraint: But this nevertheless was probably what they managed them with, their Horses being train'd to observe its Motion, and in this Sense the Cord might be taken for a Bridle. PLATE XII.

IV. Their Habit is a light Tunick tied with a Girdle that goes twice round, which reaches not below the middle of the Thigh, and out of which the Arms appear naked. It does not appear that there is any thing under this Tunick, the Thighs, Legs and Feet being all naked. The Habit resembles that of the *Spaniards* which we have seen upon *Scipio's* Shield. These *Mauri* wear a Shield upon the left Arm, and probably had some Lance or Arrow in the right Hand; but these are all broken off, as are almost all other Arms of this kind in the *Trajan* Column, occasion'd by their Prominency and Brittleness.

Underneath this Moor is a *German* Horseman², with a *Tiara* upon his Head after the manner of the *Dacians* and *Parthians*: His Horse is bridled, but is otherwise all naked, without either Poitral, Saddle or Crupper.

C H A P. VII.

- I. *A Numidian Horseman.* II. *The Habit of the Horsemen of the Saracens.*
III. *The Murex.*

3 I. **T**HE following Image represents a *Numidian* Horseman³, whom a *Roman* Soldier takes by the Hair, and throws upon the Ground: He has all the Marks of a Horseman of that Nation: For his whole Habit is nothing but a Cloak hanging loose and floating in the Air, so that the whole Body appears naked; which agrees with the Account that *Claudian* gives of *Numidian* Horsemen, namely, that they are arm'd with a Javelin, that their Cloak hangs on the left side, and that except the Cloak they are all naked:

*Dextra movet jaculum, prætentat pallia læva,
Cætera nudus eques.*

This Horseman indeed has neither Javelin nor Lance; tho' he once had, no doubt, but it is now broken off. The Horse has neither Bridle, Saddle, nor Crupper, but is quite naked after the manner of the *Africans*, as has been already observ'd. We need not wonder here to see a *Numidian* Horseman seiz'd by the Hair of his Head by a Man on Foot, because the Horses of that Nation were, according to *Strabo*, but small, tho' swift: They were also so taught, that the Rider could guide and manage them at his pleasure with a Switch, and some of them would even follow their Master like a Dog. The Shield he has let fall upon the Ground, is either a *Cetra* or *Pelta* in the Form of a half Moon, such as we have said the *Africans* and other Nations made use of.

II. Before we take Leave of this Article of Cavalry, it may not be amiss to take some notice of the ~~*Ishmaelites* or *Saracens*~~, mention'd by *S. Jerom* in the Life of *Malchus*, who were a sort of Vagabonds that inhabited the Deserts, and liv'd upon Rapine and Plunder, as many of the *Arabians* their Descendants do at this Day. This People rode upon Horses and Camels, went half naked, and wore long Hair tied with Ribbands: Their Arms were great Bows and long Spears. These Robbers, about three Ages after *S. Jerom*, form'd the greatest Empire in the World, and became formidable to all the Nations of the Universe.

III. We have here at the end of this Article of Cavalry, subjoyn'd the Figure of
4 a *Murex*⁴ or *Caltrop*, made of Brass, and antique, and publish'd by *F. Molinet*, in his Description of the Cabinet of *S. Genevieve*. These *Caltrops* were a sort of Instrument with four Iron Points, so dispos'd, that one always stood upright, and were scatter'd in the way through which the Enemy's Horse was expected to pass, with design to hinder their March, and put them in Disorder. This Machine was in use among the *Romans*, and by them call'd *Murex*; as we find in *Valerius Maximus*, who, speaking of the Siege of a very strong City by *Scipio Æmilianus*, says, that he was advis'd by some Persons to scatter Iron *Murices* round the Walls, and Plates of Lead set with Nails with the Points upwards, to prevent any sudden Sally of the Enemy; to which that General answer'd, that the Besieger ought never to be afraid of those he wanted to subdue. By which Story we learn that they had Iron *Caltrops*; whereas this which we have exhibited is of Brass, as is also another exactly like this in the Cabinet of the Abbot *Fauvel*.

C H A P. VIII.

I. The Roman military Ensigns in old Time. II. A Passage of Vegetius about the Ensigns. III. Other military Ensigns besides the Eagle. IV. The Standard of the Cavalry. V. Of what Materials the military Ensigns were made.

I. **W**E are told by *Pliny*, that it was *Caius Marius* who first appointed the Eagle for the proper military Ensign of the Roman Legions; and that before his time it was only the first among four others, viz. the Wolf, the Minotaur, the Horse and the Boar. He says indeed that it was carried alone to Battle some small time before *Marius*, and the rest left in the Camp; but that *Marius* laid them all quite aside for the Eagle only. In the earliest Days of the Republick, however, when they were in the greatest Simplicity, their military Ensign was nothing but a Wisp of Hay or Grass fasten'd to the top of a Pole: After which they took the Animals above-mention'd for their Ensign; and after that the Eagle, exclusive of the rest, as we have just observ'd. It appears notwithstanding from the Monuments of Antiquity transmitted to us, that there was great Variation of the military Ensigns at different times of the Republick, and especially of the Empire, so that it is no easy thing to reconcile them with what Authors have said of them: For one Writer tells us only of those that were in his time; nay sometimes it happens that he does not give an account of all, through Ignorance perhaps, and sometimes is himself mistaken in what he does relate.

II. 'The first Ensign of the whole Legion, according to *Vegetius*, was the Eagle; besides which they had the Dragon for the Ensign of each Cohort, carried by the *Draconarius* when they went to Battle. He also adds, that the Ancients having found by Experience that the Ranks in the heat of Battle were often put into Disorder, to prevent that Mischief for the future, divided their Cohorts into Centuries, and gave to each Century its proper Ensign, upon which was written the Name of the Cohort and Number of the Century, that by this means the Soldiers might at least keep in with their proper Cohort, how great soever the Disorder was. The Centurions, call'd now *Centenarii*, did besides wear the Crests of their Helmets in a particular manner, that the Centuries they commanded might the better know them; which was very easy to do when they had two such Marks, as the Ensign and Crest of the Centurion.

III. But besides the Legionary Eagle, which is the Ensign that most frequently occurs on Marble and Brass Monuments, each Cohort, especially in the later Ages of the Empire, had its particular Ensign also; in which were round or oval Tablets, with the Images of Gods, Emperors, or Generals therein: Sometimes also there were several Images in the same Ensign, one upon another; and sometimes too upon the top of the Spear, small Statues of Gods or Emperors. These Ensigns were held in great Veneration by the Romans, who, according to *Tertullian*, us'd to swear by them, and even prefer'd them to their Deities. *Pliny* also says that they perfum'd them; and *Claudian*, that they adorn'd them with Flowers:

*Mavortia signa rubescunt
Floribus, & subitis animantur frondibus haste.*

IV. The Standard, or Ensign of the Cavalry, call'd in *Latin*, *Vexillum* and *Cantabrum*; by *Tertullian*, *Siparum vexillatum*; and after the time of *Constantine*

the Great, *Labarum*, had upon it in the Times of the Christian Emperors the Monogram of Jesus Christ, together with the Cross. The Fashion of it was this: It was a long Staff or Spear with a transverse Piece of Wood at the top, making the Figure of a T, as may be seen by the Image of it publish'd by M. *de la Chausse* upon which transverse Piece hung a four-square Flag, made of a rich Stuff, and about a Foot square, which measure we take from a Comparifon of it with the Stature of the Persons that bear it, as represented upon ancient Monuments.

V. Among the feveral military Ensigns, some were of Gold and some of Silver, but most of Brass or Iron. Every Legion had its Eagle; but concerning the number of the other Ensigns, Writers are not agreed, some giving one to each Cohort, and others one even to each *Manipulus*; and herein Monuments afford us no great Help. These Ensigns were kept in the Temple of *Mars*, and from thence taken out as Necessity requir'd.

C H A P. IX.

I. *The Fecialis who went to declare War. Images of the military Ensigns. II. Other Images of them. III. The Wolf, a military Ensign even in Trajan's time. IV. Other military Ensigns of that Emperor's time.*

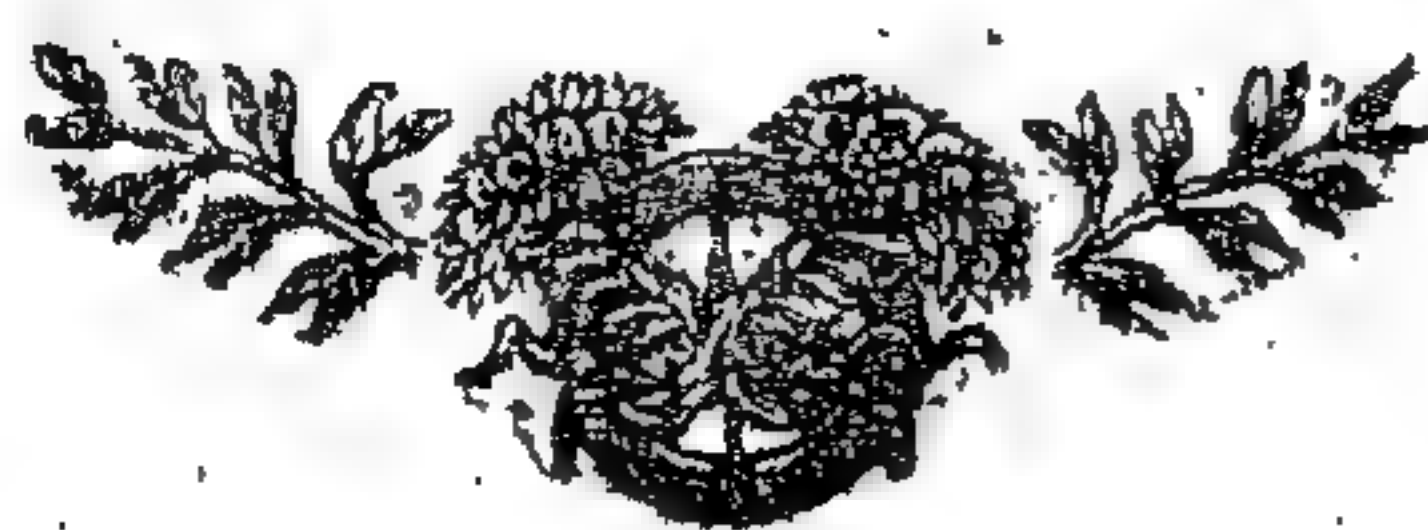
I. **T**HE Figure that presents it self next in this Plate, is an armed Soldier before the Statue of *Bellona*, whom M. *de la Chausse* takes for the *Fecialis*, who was an Officer sent by the Romans to proclaim War. *Bellona*, he says, is here represented darting a Javelin, that being the Ceremony us'd by the *Fecialis* himself when he went to declare War against any Enemy of the Romans. The two round Tablets here given, are only Parts of a military Ensign, of which sort we meet with many below among the Figures of those Ensigns, being us'd therein for placing Images of the Gods or Heroes on them. The following Eagle was the chief military Ensign, as has been already observ'd: 'Tis here plac'd upon a round Base; but in one of the Images in this Plate it's put upon a triangular one. The next Figure is the Staff or Instrument upon which the Colours or Standard was fix'd; and this, as has been already observ'd, was a small four-square Piece of rich Stuff; we shall likewise see the same again in this Plate, as also in the Medal where *Pannonia* is represented with this military Ensign. In the time of *Constantine* the Great, the Standard call'd *Labarum*, was such as it is here represented¹⁰; and then it was that the venerable Sign of the Cross, and the Name of Jesus first began to appear in it.

II. The next thing exhibited in this Plate is a large military Ensign, adorn'd with the circular Tablets and Images above-mentioned¹¹. The Tower in it denotes the taking of some City. The following Eagle¹² is plac'd at the end of a Spear upon a triangular Base. Two other military Ensigns¹³ are terminated at the top underneath the Point of the Spear, by three Staffs in the Figure of a half Square; under which is the Eagle in a Circle that appears like a Medal: Beneath the Eagle is an oblong Tablet, under which is a Circle with the Figure of some Emperor or Divinity in it: Instead of this oblong Tablet there is commonly in other Ensigns a round one in the Form of a *Discus*, which separates the upper Circles from those below: But all this will be better comprehended by viewing the

the Figures. The Standard is also here represented ¹⁴, where the Point of the Spear to which it is fasten'd, appears above the square Piece of Stuff or Flag, as well as in the other military Ensigns ¹⁵, where under the circular Tablets there's another square one, wherein is exhibited the Gate of a City, which denotes that that Legion had serv'd at the taking of some City. The following Ensign represents five round Tablets one above another ¹⁶, above all which is an open Hand, a Symbol that frequently occurs in military Ensigns. In the next Ensign ¹⁷ the Hand is crown'd with Laurel. The three former Ensigns are remarkable upon account of the round Tablets, where either Eagles, or Emperors, or Heroes are represented, and of the Gates and Towers, which are the Symbols of certain Towns besieg'd and taken. 18

III. In another Image in the following Plates, the Ram, according to *Bellori*, is carried for an Ensign before that of the Eagle; but *Lipsius* assures us that it's a Wolf, and *Fabreti* also publish'd it as such upon the Authority of the *Trajan* Column. We have likewise seen the Wolf reckon'd among the military Ensigns in a Passage in *Pliny*, cited in the beginning of this Chapter: But whether any mention is made of the Ram for an Ensign in the *Roman* History I know not. The Eagle and other military Ensigns have sometimes a Branch of a Tree in manner of a Crown, which seems to have been a Sign for the Soldiers to go and cut down Wood; nay, they are really employ'd in cutting down a Wood, where these Ensigns are present. *Bellori*, however, was of Opinion that these were not Branches, but Plumes.

IV. Nothing is more extraordinary than the Ensigns in *Trajan's* Army, which, as appears by the Provisions each Soldier carries at the end of his Pike, is undertaking a long March. In the front of all four Ensigns advance, in the top of which are square Tablets of an oblong Figure, with Images in them, one of which is most certainly a Victory, and the other three probably all Figures of *Hercules*, they having each of them a Club in one Hand resting upon the Ground, and a kind of Rod in the other: But these *Fabreti* takes for three *Cabiri*. The following Ensign terminates at the top in an Eagle with a Mural Sign upon its Back, namely the Gate of a City and two Towers. The following Standard has another military Ensign after it, in the top of which is a Hand, which here concludes the Collection of those Ensigns. But this curious Plate we shall see below. Those Ensigns that have at the top the Statue of Divinities, are distinctly seen in the Bas-Relief of *Trajan* upon *Constantine's* Arch. One of these is the Image of *Mars* resting his left Hand upon a Shield, and holding a Trophy in his right: The second seems to be the Image of *Venus*: The third of some unknown Deity; and the fourth of *Victory*. In another military Ensign with an Eagle at the top, there are four round Tablets observable. In *Constantine's* Arch there are two Statues at the top of a military Ensign, the one of *Victory*, and the other of some unknown Deity.



CHAP. X.

I. Of what use that variety of military Ensigns was. II. A Dragon, a military Ensign of the Daci, and the Romans. III. The military Ensigns of the Greeks. IV. The Scytala of the Lacedemonians,

I. **T**HE variety we have seen in military Ensigns is very great; and forasmuch as it is all almost under one and the same Prince, it is a Proof of the necessity there is of the Aid of ancient Monuments for the better understanding the Usages of Nations; most of these things we have been treating of being not so much as mention'd by Writers. These military Ensigns they fix'd in their Camps, and from thence never took them until they had offer'd Sacrifice: Nor did they reckon it a good Omen if they were pull'd up with Difficulty. It's probable that all these Statues, Images, round Tablets, &c. were moveable, and chang'd on different Occasions: But to pretend to give a Reason for all the several Changes made in the Ornaments of these Ensigns, wou'd be meer Guess-work, unless on some particular Occasions; as for Example, it's not improbable that the Towers and Gates of a City put upon an Ensign, denoted that Army or Legion to have distinguish'd it self at the Siege, or taking of some considerable Place: Again, it seems no improbable Conjecture to suppose the Branches of Trees at the top of the Ensigns, at a time the Soldiers are employ'd in the cutting Wood for their Encampments, are intended for a Sign to them to fall to that Work.

II. The Dragon was one of the military Ensigns, among the *Parthians*, as it was also among the *Dacians* and other Northern Nations. We find it represented in Trophies and Columns. The *Romans* also, who often adopted the Usages and Customs of the People they conquer'd, took it after some time among their military Ensigns; tho' I cannot say at what time they did this, or whether they indeed did it in Imitation of any of their conquer'd Nations, or not. The Bearers of them were call'd *Draconarii*. The Ensigns of the *Persians* had the Sun, which, according to *Curtius*, was their chief Deity.

III. The military Ensigns of the *Greeks*, were, according to Dr. *Potter*, of different Forms; every City and every Country having its Ensign peculiar to it self. The military Ensigns of the *Athenians* had the Owl, a Bird consecrated to *Minerva* their Patron Deity. Those of the *Thebans* had the *Sphinx* in Memory of the Story of *Oedipus*. Sometimes a purple *Chlamys* was put upon the top of a Spear for a Sign to them to give Battle: Sometimes also these Signs were arbitrary, as when *Cleomenes* order'd his Soldiers to be ready to fight, as soon as they saw a piece of Linnen Cloth hoisted in the Air in the neighbourhood of *Olympus*. They were also to cease fighting upon the taking away of these Signs.

IV. The *Scytala* of the *Lacedemonians* was an Invention the Officers made use of to write their Intelligence to one another upon, and was a sort of Cypher to prevent Discovery if it should happen to be intercepted. When the *Ephori*, says *Plutarch* in the Life of *Lysander*, send a General or Admiral upon any Expedition, they prepare two Staffs or Truncheons exactly of the same Length and Thickness, which they call *Scytale*, one of which they give to him, and keep the other themselves. When therefore they have any secret Intelligence to send, they cut the Matter they write on into long narrow Slips, which they wrap close about the Staff, without leaving the least void Space, and then write upon it what they have to communicate

municate, taking it afterwards from off the Staff, and sending it to the Party it's design'd for, who must first bind it about his own Staff or *Scytala* in the same manner it was done when it was writ, before he himself can read it.

C H A P. XI.

I. The Military Vocal Signals, or with musical Instruments; II. The musical Instruments of divers Nations. III. The Trumpet; IV. The Horn, and the Lituus.

I. **T**HESE military Ensigns we have been speaking of were all dumb Signs; we come now therefore to such as were made by the Voice, or the Sound of Instruments. In the Camp they had a sort of Cry in the Night, which was used by those that were upon the Watch; as they had also in Engagements; which sort of Cries, according to *Vegetius*, were *Victoria*, *Palma*, *Fortitudo*, *Deus nobiscum sit*, *Triumphus Imperatoris*. But these they varied, for fear the Uniformity of them should teach the Enemy the Motions they were to make. The Signal to march, when the Enemy was to be surpris'd, was by giving them a *Tessera* of Brass, Silver, or Ivory; or else by Sound of Trumpet, when no Surprise was intended, and sometimes the Signal was both these together. We have some of these Marks call'd *Tesseræ* yet remaining. But all these Signals varied according to Times and Circumstances; so that it would be Labour lost to seek for Uniformity in a thing where Change was sometimes necessary. We find Examples in Authors of their giving three Signals sometimes to Battle; but all these were also liable to change, as we have observ'd of the dumb Signals above. *Fabius Maximus*, according to *Plutarch*, caus'd a purple Tunick to be put upon the General's Tent for a Signal to Battle, as did also *Brutus* and *Cassius*; from whence it is that *Isidore* makes this to have been a common Signal under the Roman Consuls.

II. *Clemens Alexandrinus* says that the *Hetruscans* made use of the Trumpet in War; the *Arcadians* of the Flute; the *Sicilians* of Instruments called *Πινελίδες*; the *Cretans* of the Lyre; the *Lacedemonians* of the Flute; the *Thracians* of the Horn; the *Egyptians* of the Drum; and the *Arabians* of the Cymbal. The Drum was also, according to *Justin*, the Signal to Battle among the *Parthians*.

The ancient *Greeks*, as the learned Dr. *Potter*, in his *Archæologia Græca*, has very well observ'd, made use of certain Shells which sounded like Trumpets, as appears from the Testimony of many of the Poets. 'Tis certain, however, that in *Homer's* time the Trumpet was in use.

III. The Trumpet, in *Latin*, *Tuba* or *Buccina*, and in *Greek* *Σάλπιγξ*, was, according to several *Roman* Authors, the Invention of the *Hetruscans*; which indeed may be true with regard to the *Romans*, who perhaps might borrow that with many other things from the *Hetruscans*: But certain it is, that the Use of this Instrument was of such early Antiquity, that prophane Authors cannot trace it up to its Origin; for it appears to have been older than *Moses*. We find upon *Roman* Monuments different sorts of Trumpets, some crooked, and others strait as Hautboys; both which will be exhibited in the Battles represented below.

IV. The Horn was also a military Signal, and the Person that winded it call'd *Cornicen*. *Fabretti* has given us the Form of one of these found in an ancient Monument¹⁹, which resembles almost an Ox's Horn, only 'tis something more crooked. He also publish'd the Form of a *Lituus*, another military Instrument us'd as a Signal,

nal, which some have confounded with the Trumpet; nay, I know not whether the old *Latin* Poets have not also put one for the other indifferently. The *Liticeus* we have here given after *Fabreti*²⁰, pretty much resembles the augural Staff, call'd by that Name. He that play'd upon this Instrument was call'd *Liticen*, as appears by an Inscription produc'd by the same *Fabreti*, *Sextus Antoninus Niger* being there call'd the *Liticen* of the third *Parthian* Legion.

C H A P. XII.

I. The military Works of the Ancients. II. The prodigious Works of the Roman Soldiers. III. Several Figures of the military Works. IV. The Magazines of the Army.

I. THERE's nothing in all Antiquity more remarkable than the military Works: And herein the *Greeks* and *Romans* excell'd all other Nations, unless we except the *Persians*, who may be said to have equall'd them, or at least not to have come much short of them. By military Works is here understood all the Art of fortifying and adorning the Camps, making Intrenchments, and Redoubts and building Fortresses. In this the *Persians* shew'd their great Skill at the Expedition of *Xerxes*: For after the Defeat of their Army at *Plataeæ*, part of those who fled retreated to their Camp, where they defended themselves a long time against the *Greeks*, until the *Athenians* came, who were better skill'd in Attacks of that kind, and forc'd their Camp, putting an end thereby to that fatal Expedition. The *Athenians* were celebrated for their military Knowledge; and when they laid Siege to a Town, their way was to build a Wall about it, and leave a sufficient number of Troops to guard it, marching the rest of the Army to make War elsewhere, without any regard to the Length of the Siege, knowing well that when the Provisions of the Besieg'd fail'd, the Place must surrender in course. The *Macedonians* also distinguish'd themselves by their military Works, and are by *Livy* compar'd to the *Romans* on that account, tho' he justly gives the Preference to the latter. *Polybius* says the *Macedonians* labour'd hard in digging the Ground, fortifying and providing for the Camp, and in all other Works of that kind: Which appears from *Alexander* the Great's joining the Island of *Tyre* to the Continent when he besieg'd it, in which State it has remain'd to this Day.

II. But the *Romans*, without all doubt, were the People that excell'd all other Nations in this Particular, there being no Enterprize how great soever that ever discourag'd them. Thus we find that *Caius Marius* made an impregnable Camp in a very little time against the *Cimbrians* and *Teutones*. *Julius Caesar* also in a few Days caus'd a Wall nineteen Miles long to be built, which join'd Mount *Jura* to the Lake *Lemanus*, to hinder the *Helvetians* from passing that way: This Wall was seventeen Foot high, had a Ditch all along, and defended at certain Distances with Towers and Fortresses. This Work done at the opening of a Campaign, would be thought incredible, had not *Caesar* himself told us so. His Bridge also over the *Rhine* built in so short a time, is equally surprising, especially if we consider the Workmanship and Strength of it. His Camp about *Alexia* was likewise astonishing, and fortified in such a manner, that at this Day it would be thought a Work sufficient to employ a hundred thousand Men many Years. It was about
four



Finjan. Pili



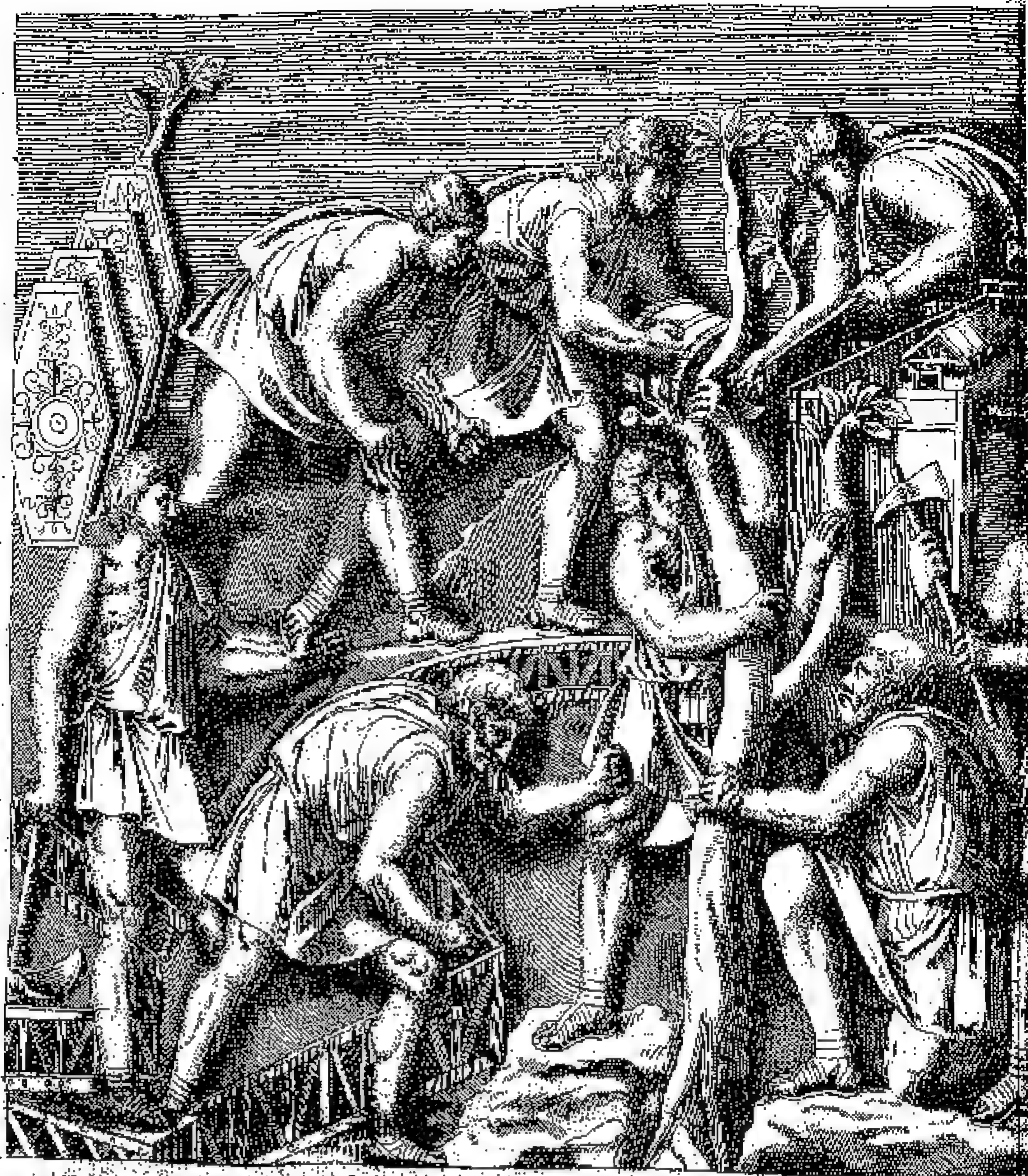


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Trajan Pillar



Tragedy Pillar

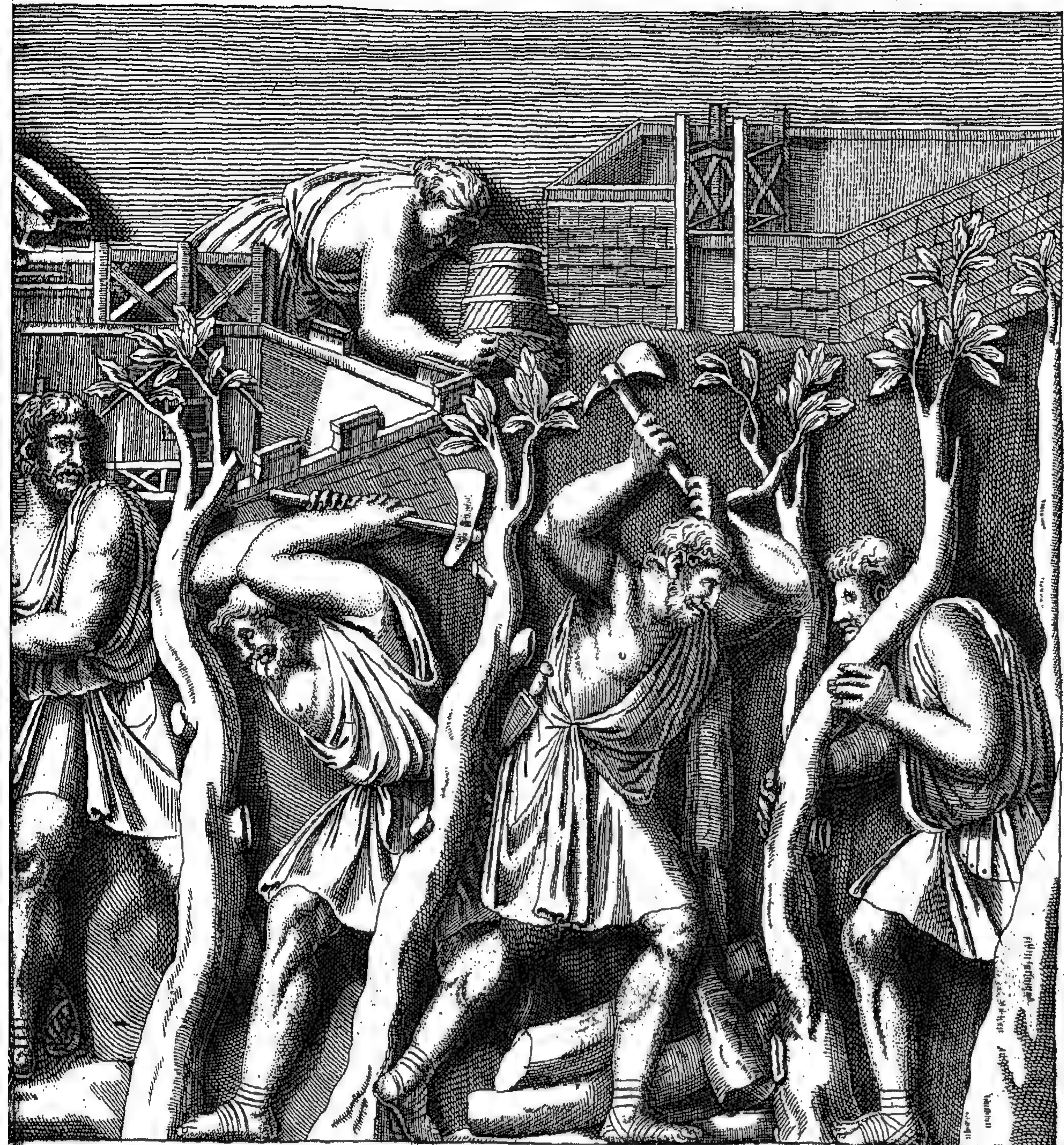


Tragedy Pillar



Tragedy Pillar





Trajan's Pillar



Trajan's Pillar

four Leagues in Circumference, and had a double Ditch all round it of fifteen Foot broad, and as many deep, which was fill'd with Water brought thither from the River: There was also a large Terrass round it, with Parapets and Palisades, and Towers built at eighty Foot distance from one another; the Description of all which may be seen in his Commentaries. I shall not here stay to describe his Camp of eighteen Miles long, design'd for a Check upon *Pompey's* Camp at *Pharsalia*. These Works are all astonishing to us at this Day, and we even wonder to see a small part of these things done now. The Men of that Age must needs have been robust, and enur'd to labour from their Infancy, to be able to do such great things in so short a space of time. But there's another Reason may be assign'd for such Expedition, and that is, that every Individual consider'd the publick Weal as his own private Affair; so that where a whole Army was thus united by one common Band of Affection for their Country, all things must needs go smoothly on. On the contrary, a Soldier at this Day troubles not himself about the Issue of things, nor thinks of any thing more than to undergo as little Fatigue as he can. The Pay-master also and General think rather how they may fill their own Coffers with the publick Treasure, than promote the Honour of their Prince and the Safety of the Army; whence it often comes to pass that very small Acquisitions are purchas'd at a vast Expence.

III. We come now to the particular military Works of the *Romans* represented in the *Trajan* Column. In the first Representation of the following Plate we see the Soldiers employ'd in cutting down Wood¹, and piling it up; some being at work with their Axes, the Shape of which the Reader will observe; others carrying it upon their Shoulders, and others laying it up in great Piles, one of which is of a semi-circular Form. The Wood cut here seems to have been design'd for burning. PLATE XIII.

In another Image² the Soldiers are also cutting down Wood and carrying it away. The manner of drawing along the Trunk of a Tree by two Soldiers is here also observable. In the following Image they are either employ'd in an Encampment³, or in building a Fortress, and that with square Free-stone, which is what all the Camps, Redoubts and Forts in the *Trajan* Column are built with.

The following Image represents without doubt an Encampment⁴, where some are at work in cutting of Stone with the Hammer and Chisel; others in carrying it on Levers upon their Shoulders; others in making Mortar and putting it in large Baskets, and others in Masonry. The Camp they are forming seems to be four-square, tho' they sometimes make them quite round. Besides the Camp there are Houses and other Edifices building; so that it's probable the Army was to lye there for some considerable time, or else perhaps these Buildings are design'd for a Magazine of Arms, or a place of Retreat. All these Soldiers thus at work are arm'd with a Cuirass; but their Helmets are hung upon Sticks fix'd in the Ground, and their Shields rear'd against the same Sticks. The Mark upon these Shields is the Thunderbolt, which inclines one to think that these Soldiers belong to the *Legio Fulminatrix*. At one of the Extremities of this Image there's a *Dacian* taken Prisoner, and lead by a Soldier.

The Men that are at work in the upper Part⁵ of the following Plate are lightly habited, and seen to be auxiliary Troops, of that sort call'd *Velites*: Their Shields are *Hexagons*, and plac'd one against another. We may observe some of those, whose Instruments are fallen from their Hands thro' the Injury of time. PLATE XIV.

In another Image some Men are cutting down Corn with Sickles⁶, others are gathering it into Stacks, and the Horses are there ready probably to be loaded with these Provisions, to carry to the Camp. The Men in the following Image⁷ are working at an Encampment. Here are also Carts loaded with Wine put up in

in Casks, the Extremities of which only appear, the rest being conceal'd behind the Buildings. The Form of the Tents is observable in these two Images.

- 4 IV. The next Image ⁴ represents them working at Magazines for the Army; those Roofs that terminate in a Cone being either Granaries or Places for Hay: Round about these Granaries they are making Pallisades, which stand so close to one another, as to leave no Interval between them. In the other Image they are
5 forming a Camp^s, the Gates of which are two large Stone Pillars with their Chapiters all of one piece.

PLATE The following Plate exhibits also Granaries¹ or Magazines of Corn encompass'd
XV. with Pallisades; which Granaries are Houses of one Story, with great Torches or
¹ Flambeaux in the Window, to give Light to those that were upon the *Danube* in the Night, that River running very near. Besides these Houses there are also
² Store-houses² for Hay, which are of a conical Figure, and covered with Straw. There
³ are also two Houses for keeping Wood, each of them guarded with two Centinels³.
⁴ There is also a large Pile of Wood⁴: All which is taken from *Trajan's Column*, the most beautiful of all remaining Monuments, both for number of Figures, and Elegancy of Sculpture. Notwithstanding which, we see here how negligent or ignorant the Ancients were of Perspective, even in their most finish'd Works: For the two Soldiers are as high as the Houses; and the Doors, which are not quite three Foot high, are so strait, that one of the Soldiers can hardly get a Leg into them: The upper Story also, if measur'd after the Stature of the Soldiers, is not above a Foot high; and the Portico, which runs round the whole, has Balustrades not quite five Inches high.

B O O K IV.

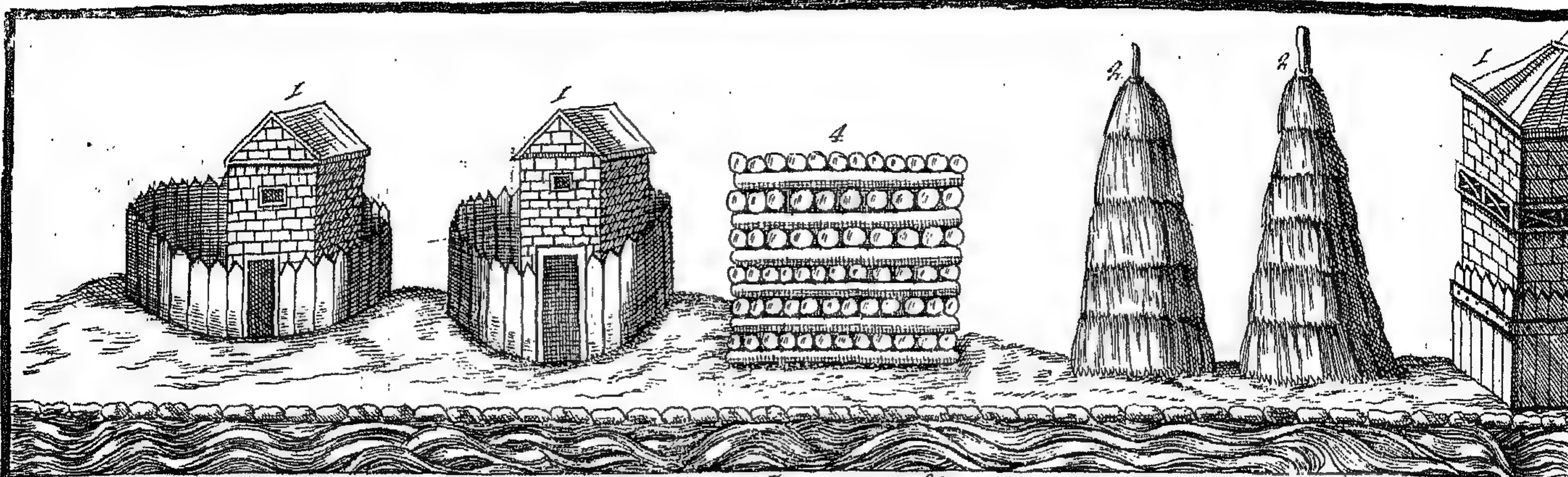
Concerning the Generals Harangues to the Army; the Marches and Battles of the Armies.

C H A P. I.

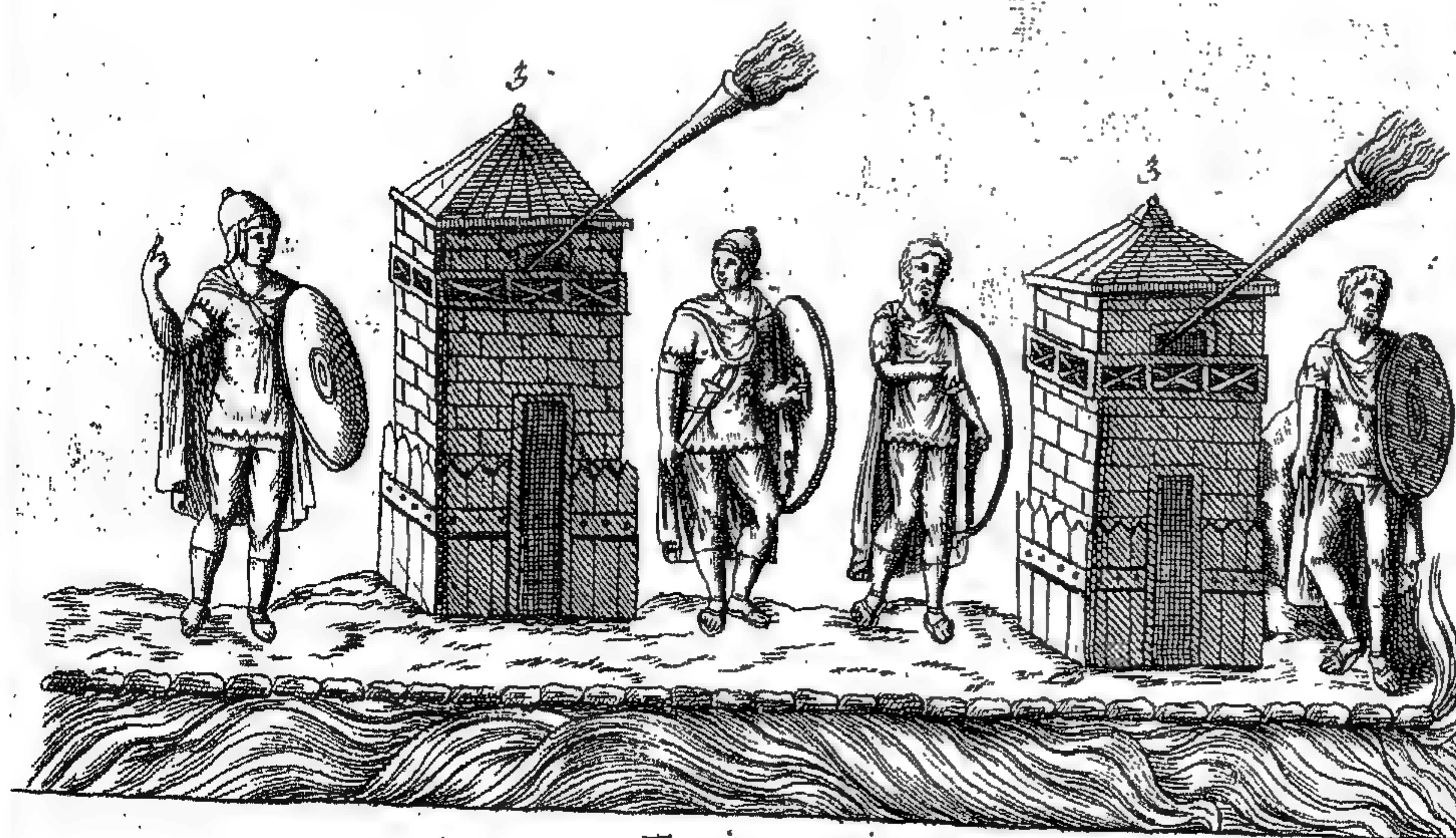
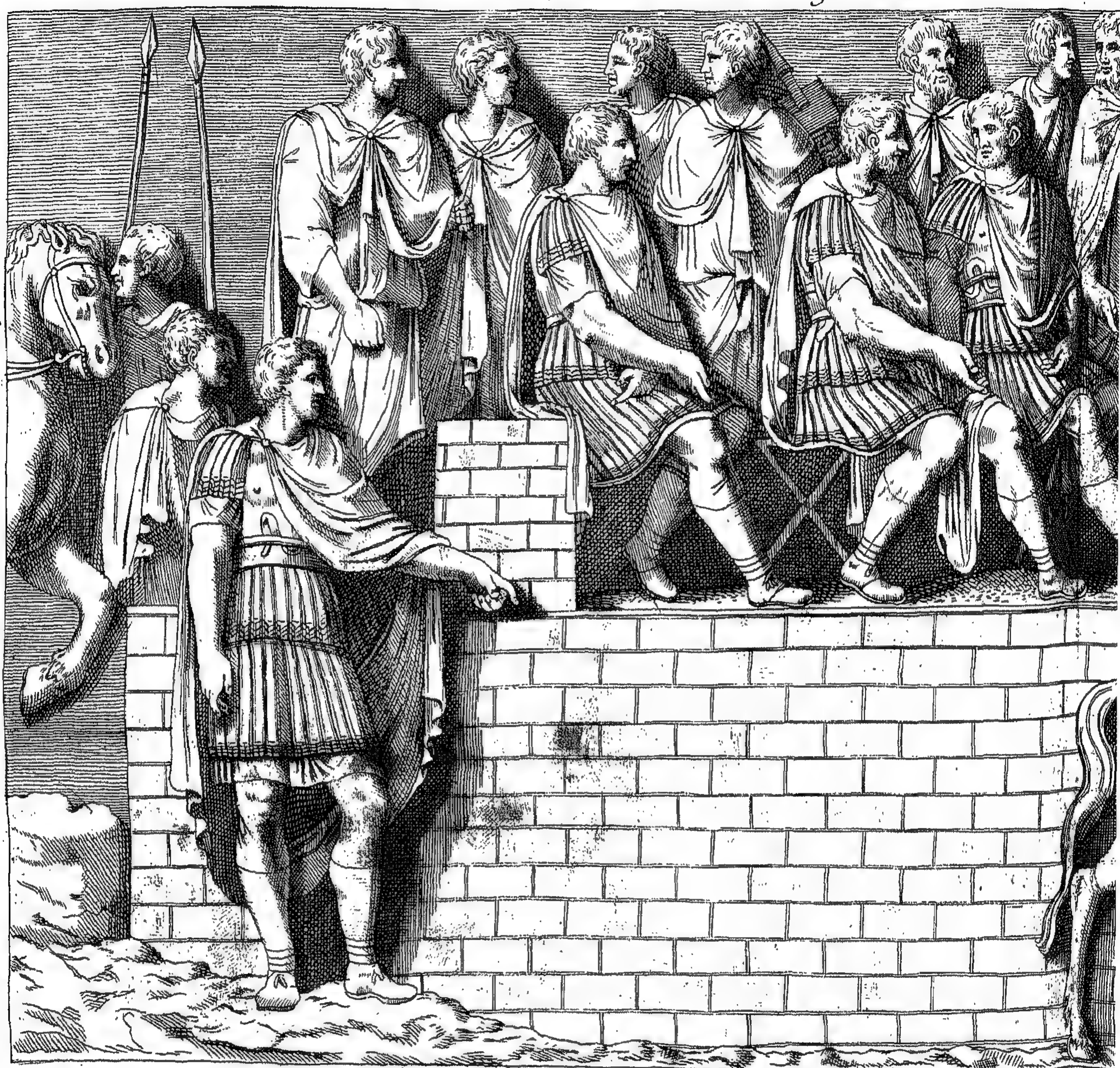
- I. *The Harangues of Emperors and Generals to their Armies.* II. *The Shape of the Suggestus from which they spoke.* III. *Images of them, haranguing.* IV. *Other Images.*

I. ^T WAS no uncommon thing for Emperors and Generals to harangue the Soldiers at the Beginning of an Expedition, or just before an Engagement, to encourage them to behave themselves manfully; and also after a Battle to praise and commend them when they had acquitted themselves well. Upon this Occasion the Emperor generally stood upon an Eminence, rais'd for that purpose, call'd in *Latin*, *Suggestus* or *Tribunal*, and had the Tribunes and chief Officers for that time about him.

II. These *Tribunalia* in *Trajan's Column* seem to have been made generally of Free-stone, and of elegant Workmanship. But *Fabreti* thinks that the Master Carver did this only to give more Grace and Beauty to his Column, and that instead of Free-stone they were often made of green Turf. He likewise adds that this is to be understood also of many other Works in that Column, as well as the
Tri-

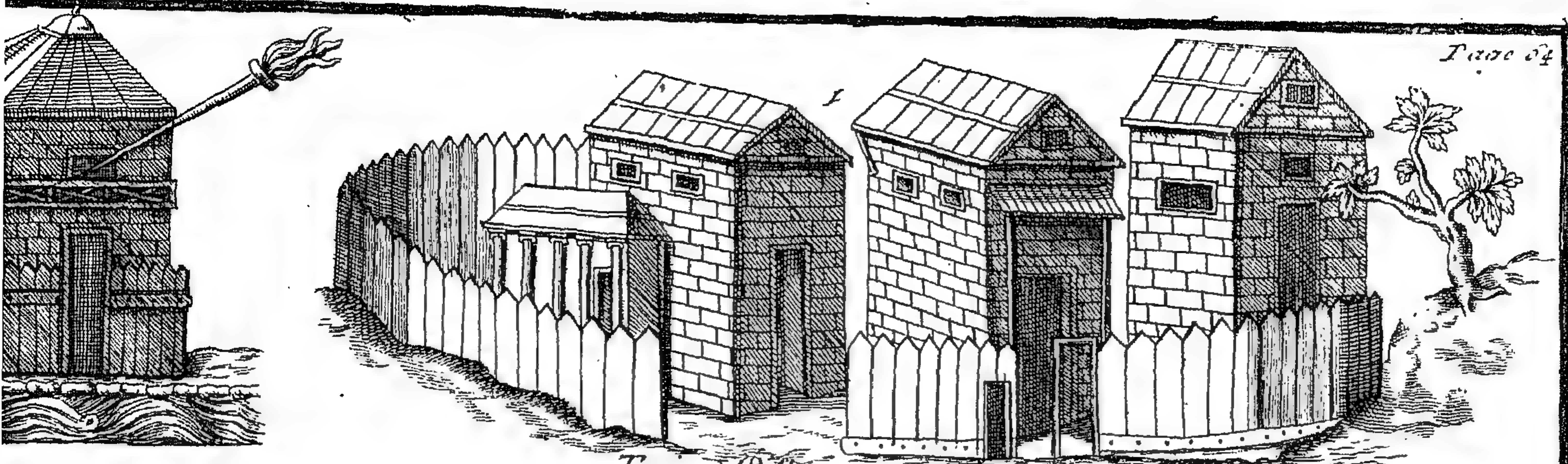


Trajan's Pillar



Trajan's Pillar





Trajan's Pillar



Trajan's Pillar



Trajan's Pillar



Trajan's Pillar

Tribunalia; giving this for a Reason, that it is by no means probable that an Army, which was continually in Motion, and so often changing Camp, could have time to run up such Buildings as these of Stone. He has also the Testimonies of several Authors which seem to support him in this; as first of *Tacitus*, who says that the Soldiers gather'd a heap of Turf together, and made a Tribunal of it, that the Emperor might be more conspicuous; then of *Dio*, whose Words are, that he mounted upon a Tribunal made of a marshy kind of Earth after the manner of the *Romans*; next of *Plutarch*, who in the Life of *Pompey* says, that there was no Tribunal, they having not rais'd an Eminence of green Turf, as was the Custom of Armies: *Vopiscus* seems also to be of his side, who speaking, in the Life of *Tacitus*, of the manner of making *Probus* Emperor, says, that there was a great Concourse, and that a Tribunal was made of green Turf, and he proclaim'd Emperor: *Ammianus Marcellinus* is likewise for him, and says that *Julian* mounted a Tribunal of green Turf, and harangued the chief Officers of the Army: To all which he adds the Testimony of *Pliny* the Younger, who, in his Panegyrick upon *Trajan*, says that a Tribunal was made of green Turf, and that he was encompass'd not only with *Fasces*, but also with Spears and military Ensigns. The Poets likewise, he says, give Evidence of this, as *Lucan*, *Statius* and *Prudentius*, who all say that these Tribunals were made of green Turf.

Thus does *Fabretti* produce a number of Authorities to prove that these *Tribunalia* were made of Turf. But what of all this? Are we to give up our Senses, and not believe our Eyes, when they see upon *Trajan's* Column Tribunals made of Free-stone? And does it therefore follow that the Carver made them thus for Ornament only? If so, why in the same Column are they sometimes made of Stone, and that very curiously, and sometimes of green Turf without the least Ornament. As to the Difficulty of making these Tribunals of Stone in a short time, there's nothing in it, if we consider the Greatness of the Army, and every individual Soldier in it engag'd in the Work. But we know elsewhere that in *Trajan's* time they did make Tribunals of Stone: For so *Zosimus* informs us, where he gives us the Account of *Julian's* fatal Expedition against the *Parthians*, telling us that he arriv'd at *Sitha*, then at *Megia*, and afterwards at the City of *Zaragarda*, where he found a Tribunal of Stone very high, which the Inhabitants call'd *Trajan's* Tribunal, it having been built by that Prince. *Ammianus Marcellinus* says also that it was *Trajan's* Tribunal. From all which it follows that these Tribunals were sometimes made of Stone, and sometimes of green Turf, according to the Convenience of the Place. But however it be, we have here represented them as they are exhibited upon the Column.

III. In the first Tribunal *Trajan* does not seem to harangue the Soldiers, but rather to consult with the principal Officers upon what was to be done: Two of these Officers are habited as he is, and set down with him: The rest who stand round, and are differently habited, seem to be Subalterns. At the Foot of the Tribunal there are two military Ensigns call'd *Vexilla*, which the Cavalry made use of. The four Horses that appear here have Reins to the Bridles as well as Bits; tho' *M. Fabretti* insists that all the Horses in the Column have Bits, but no Reins. *Bellori* also thought he saw Reins: But whether of these two Gentlemen are in the right, we leave to those that are upon the Place to examine.

In the following Image *Trajan* is haranguing his Soldiers upon a Tribunal of Stone, at the Foot of which are the *Signiferi* or Ensign-bearers. The Emperor, with several Officers about him, points with his right Hand, and in his left holds a Scroll. In the next Image of an Harangue, *Trajan* holds a Sword in his left Hand, which is probably of that sort call'd *Parazonium*. This Tribunal seems not to be of Stone, but of Turf, or else a piece of advanc'd Ground met with by chance.

PLATE XVI. In the next Image ¹, *Trajan* accompanied with two of the principal Officers and a Liſtor, harangues his Troops from a Tribunal, who appear here very numerous. He that is in the Front is a *Signifer* carrying the Eagle, behind whom are three other *Signiferi*.

In the two following Harangues there is nothing particular, except that the first ² is made from a Tribunal of Turf, whereas the last is in the Camp ³.

PLATE XVII. The next Harangue is made by *Marcus Aurelius* from a Tribunal ¹, accompanied with four Officers. He is habited in a *Chlamys* or *Paludamentum*, and in his left Hand holds a very ſhort Spear or *Pilum*. The Tribunal which by the way ſeems not to be of Stone, is encompaſs'd with Soldiers and *Signiferi*. The Cavalry which marches before belongs to another Scene of Action.

² In the other Image ² *Trajan* is giving his Orders from an Eminence; and before him three Soldiers march in a File a great pace, ſeemingly to take a view of ſomething, or to make ſome Diſcovery. Theſe Orders ſeem to be given before the Camp, and probably at a time when *Trajan* was going upon ſome Expedition.

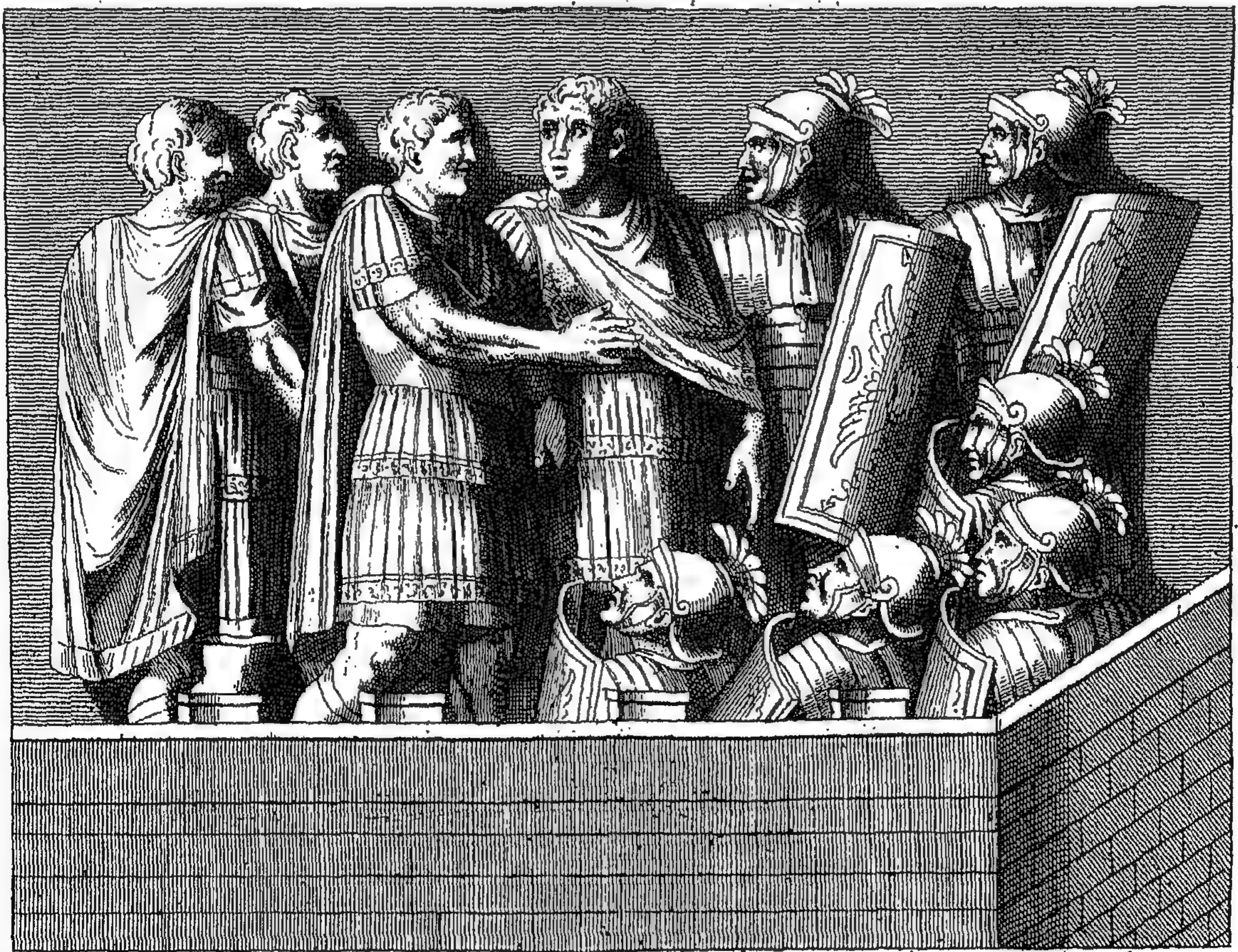
C H A P. II.

I. *The March of the Roman Army.* II. *Another Method of the Army's marching.* III. *The March of the Cavalry.*

I. **T**HERE'S nothing more agreeable than to take a View of the *Roman Army* upon a March, and that theſe two ways; either upon leaving the Camp to go upon ſome haſty military Expedition, when the Soldiers had little or no Baggage to carry, or elſe upon breaking up the Camp to go upon ſome more diſtant Enterprize, when the Soldiers were loaded with Proviſion; in both which Views we have here repreſented the *Roman Army*. In the firſt ¹, the Emperor *Trajan*, preceded by ſome led Horſes, marches on Foot upon a Bridge of Boats at the Head of the Army: After him come the *Signiferi*, five in number; all wearing a Lion's Skin upon their Heads, which covers both that and their Shoulders. Theſe *Signiferi* are more lightly arm'd than the Legionaries. The firſt Enſign that's carried is the Wolf, which was anciently in uſe among the *Romans*, but occurs leſs frequently in the Monuments of later Ages. In the *Trajan Column* grav'd by *Bellori's* Direction, there is the Ram for an Enſign inſtead of the Wolf; but *Fabretti*, who examin'd the thing more narrowly, corrected that Miſtake, and has given us the Wolf, as it is here repreſented, a little injur'd by Time, yet ſo as that one may perceive it has more the Form of a Wolf than of a Ram. Beſides, as we have never ſeen the Ram either in Authors or antient Monuments, among the military Enſigns of the *Romans*, ſo we made no further Scruple of giving the Wolf inſtead of the Ram. The ſecond Enſign is the Eagle upon a triangular Baſe at the end of a thick Staff. After the Enſigns follow the Legionaries bare-headed, their Helmets hanging before upon the right Shoulder; which is what is elſewhere obſerv'd, when they are upon a quick March towards the Enemy, yet at ſome Diſtance. The Army marches before a Camp, fortified after the *Roman* manner, where the Soldiers that are upon Guard are upon the Ramparts to ſee the Army paſs, which it does over a Bridge of Boats. There are Waggons alſo loaden with Helmets, Spears and Bucklers, which march along with the Army, ſome drawn with Oxen, and ſome with Horſes.

II. The







Col. Tragine



Col.



Col.



Antonine



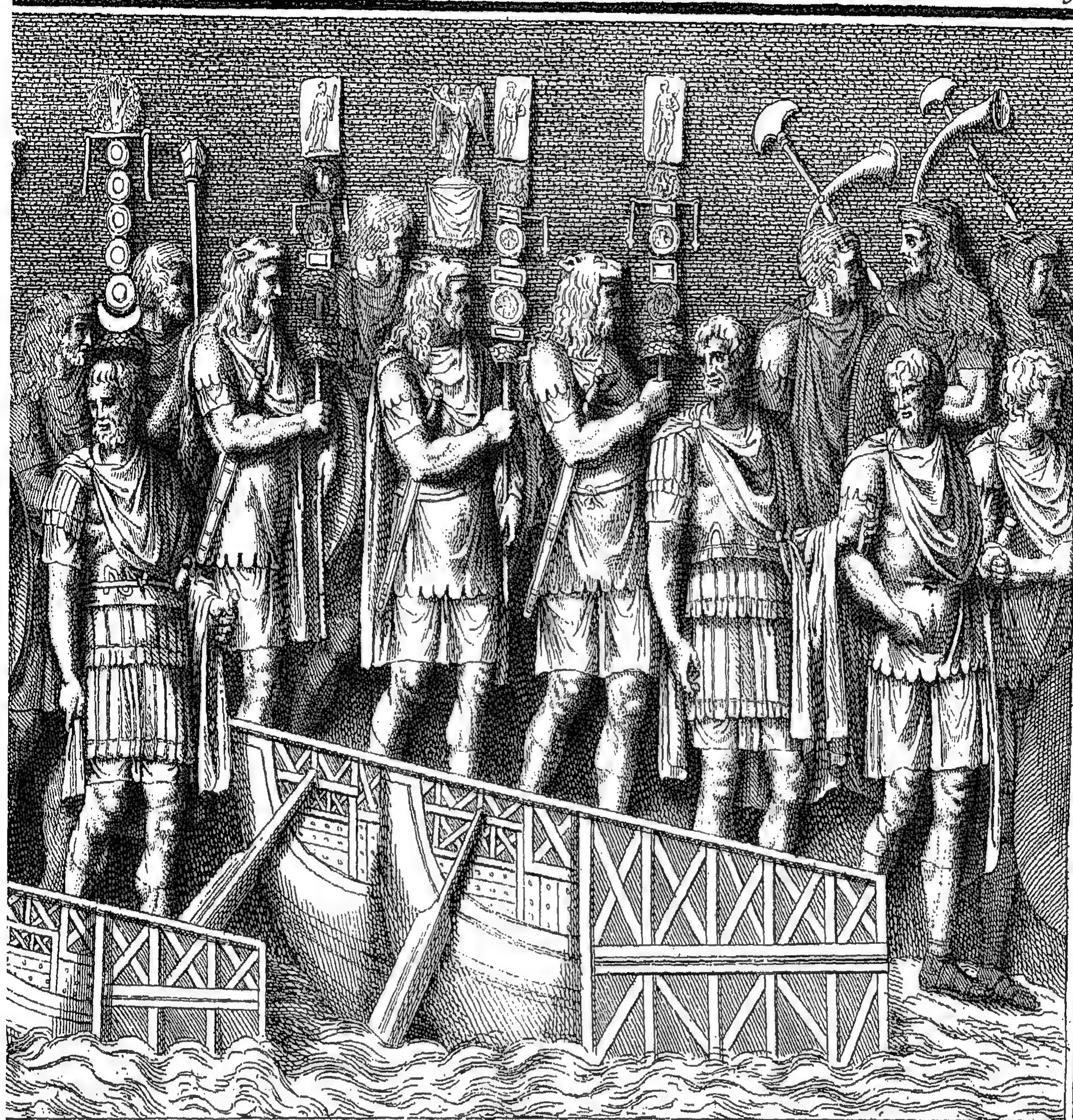
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Col. Trajane



Col. Trajane

II. The following March of a *Roman* Army is more worth our Observation, PLATE XVIII.
 the Soldiers there being loaded with Provisions, as if they were upon a long Expedition¹. The Army passes over a Bridge of Boats preceded by two Trumpets, and two Men arm'd with half Pikes, the Points of which are in the Form of a half Moon, which sort of Arms I do not remember ever to have seen in any other Monument. Next to these come the military Ensigns, which are something remarkable; the two first having, besides the usual Marks of Distinction, the entire Image of a naked Man carrying something in his Hand, which at first sight one would take for a *Hercules*: The third has a winged *Victory*, and the fourth a Figure like the two first. These Figures are very small, even in the Marble it self, and worn and spoil'd in several places, so that they have given Occasion for some Dispute: For *Bellori* fancied he saw Palms and Branches in their Hands, and took them for Sea-Officers or Ensigns of the Marines, or else for the Soldiers call'd *Classarii*; whereas *Fabreti*, on the contrary, contends that they are *Cabiri*, and that their Bonnets exactly resemble the *Pilei* of those Deities; that what they hold in their Hand is not very distinguishable, it being worn out and decay'd upon the Marble; but that it's possible it may have been a Mallet, such a one as what we see upon Medals in the Hands of the *Cabiri*. But all this he only offers as Conjecture, without asserting any thing. The Soldiers heavily arm'd have their Helmets hanging before upon the right Shoulder, and wear their Bucklers as usual: They have also their Provision in a kind of Wallet, which they hang at the end of their Spear, as may be seen in the Image. This Provision consisted chiefly in Flower, or Biscuit, Cheese, and salted Meat, with Vinegar to mix with their Water for Drink. Here are also seen Cups and Spoons, and among some of them a Grater: All which Provision together is suppos'd to be about fifty or sixty Pound weight; so that by their carrying each of them such heavy Baggage, they had no great Occasion for any great number of Waggons. *Caius Marius* was the first that put the Soldiers upon carrying such a Weight, for which reason it was that his Soldiers were call'd *Marius's* Mules; but this Custom was subjected to many Changes. *Pescennius Niger*, who was afterwards Emperor, and very severe in military Discipline, would not suffer the Soldiers to carry any other sort of drinking Vessels but wooden Cups, or to drink Wine upon any Expedition, but Vinegar only: And this they are thought to have carried in those Vases which appear at the end of their Spears, and to have mix'd a little of it with Water when they drank to give it a Relish; which sort of Drink they call'd *Posca*. The same *Niger* forbid Bakers to follow the Army, and order'd that both Soldiers and others should be content with Biscuit, which is thought to be the same with what *Spartian* calls *Buccellatum*.

III. We have now seen the March of the *Roman* Infantry, and come next to that of the Cavalry, which appears in the following Order². *Trajan* marches at the Head, the *Dacians* meeting him with their Children, and in a suppliant Posture stretching out their Hands to him. The *Roman* Cavalry march after *Trajan* by two and two, all arm'd with Lances, now fallen through the Injury of Time. They have also Swords by their Sides, and Shields under their Saddle-Cloth. Beside the Tunick they have also a *Chlamys* on, which some let hang loose and floating with the Wind, others wrap about them, and one among them fastens with a Girdle.

C H A P. III.

I. *Battles of the Romans with the Daci.* II. *German Auxiliaries of the Romans fighting with a Club.* III. *Other Battles.*

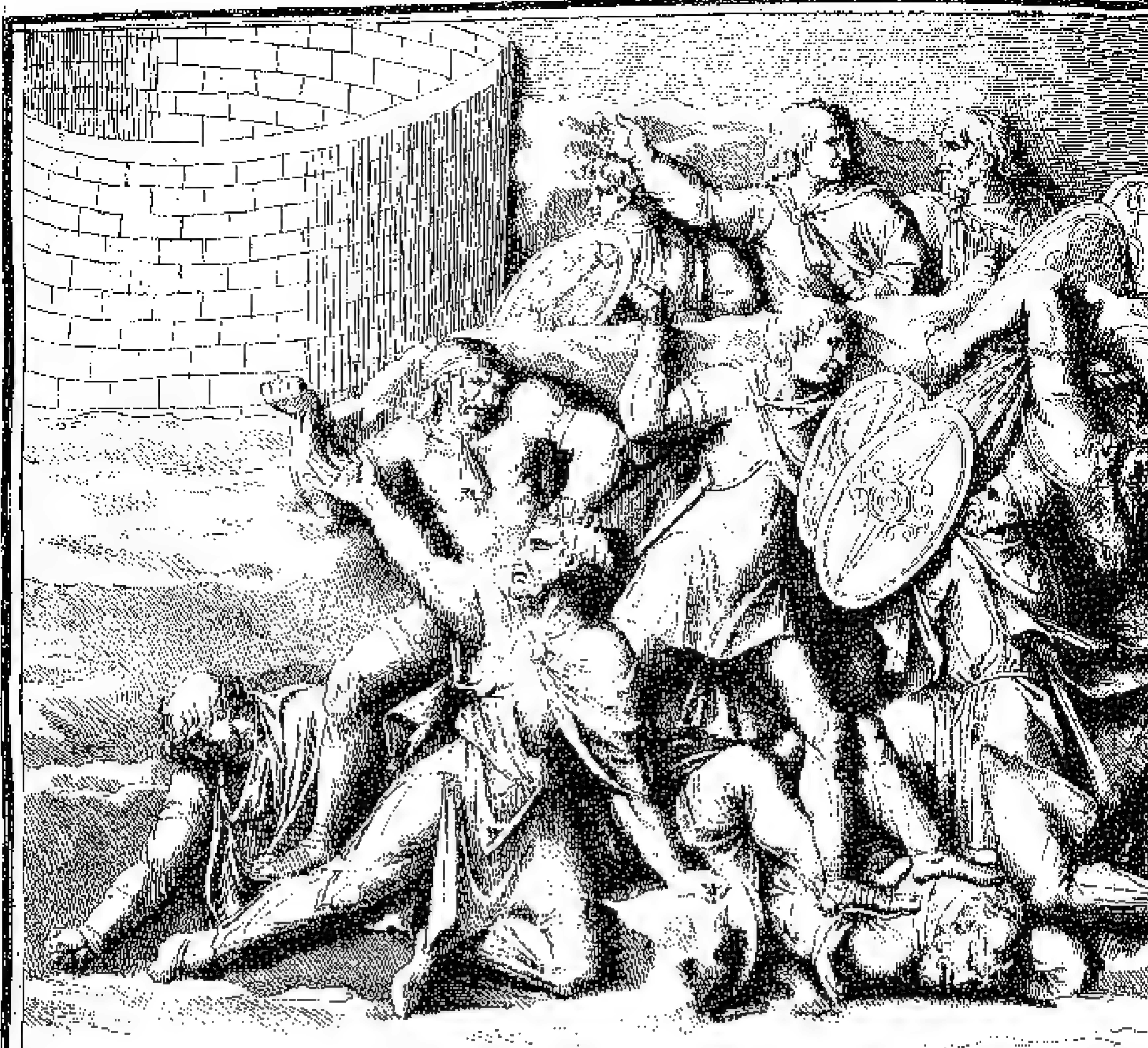
I. **T**H O' ancient Monuments and *Roman Marbles* exhibit a great number of Battles, yet we can no where distinguish the Disposition of the Armies, forasmuch as these Monuments represent only a small part of an Army: Besides, the Combatants are so few in number, that nothing can be seen of the Disposition of the Battalions, Cohorts and Squadrons. Moreover at that time they were ignorant of what we call *Perspective*, as appears from their not having a Word in their Language to signify it, so that they could represent but a handful of Men at a time. We shall present the Reader with what ancient Monuments furnish us with of Battles, and then shall proceed to what we find of the Disposition of the Forces among the *Greeks*, *Romans* and other Nations, in the Historians of those Countries.

- 3 The first Battle of the *Dacians* with the *Romans* is of their Infantry¹, where the Success was not favourable to the *Dacians*, nevertheless they still stand it out. One of the Soldiers throws a great Stone at the *Romans*, a way of fighting us'd by *Homer's* Heroes. At the Rear of the *Roman* Infantry there are Archers of some neighbouring Nation to the *Daci*, whom *Trajan* had in his Service, as well as many other Mercenaries. We have already represented the military Habit and Arms of that Nation. In this place most of the Arms are broken and lost thro' the Injury of Time: We have here however the Sword of one of the *Daci*, which is crooked like a Sickle, and which we have before taken notice of in the Chapter of Swords.

PLATE XIX. The following Battle¹ seems to be a very bloody one, many being fallen on the side of the *Dacians*: The Arms of both the Parties which issued out of the Bass-Relief are all broken; nor is there any Order preserv'd here, any more than in other Battles of this kind. The Battle however is fought near a Camp or round Fortrefs.

- 2 II. In the following Battle,² where the *Daci*, according to Custom, have the worst of it, the *Romans* are but few in number; but then they have many *German* Auxiliaries, most of whom fight with Clubs. These Clubs seem not to be above a Foot and a half long, if measur'd by the Stature of the Combatants. The *Germans* are naked from the Waist upwards, but have long Breeches on that reach down to their Ankles. Their Habit so much resembles that of the *Germans* in the Column of *Antoninus*, that there is Reason to believe they are *German* Auxiliaries. At the top of the Image are three small Waggon, upon one of which is the Dragon, the Ensign of the *Daci*, which the *Romans* also took into the number of their Ensigns. The Figure of the Woman with a Veil extended over her Head, has given occasion for some Dispute; some having taken her for *Diana*. A Woman, however, represented with a Veil extended over her Head, is the common Symbol of *Night*, and when she advances her Head beyond the Veil, as this does, generally signifies *Aurora*; so that if this is *Aurora*, as it's not improbable, it may signify that the Battle was fought at Break of Day.

PLATE XX. III. In the following Image also¹ the Battle is fought by Auxiliaries, there being very few *Romans*. Among these Auxiliaries there are both Archers and Fighters with a Club; which last are probably *Germans*, such as we see sometimes upon the Column of *Antoninus*. The Archers here have Bonnets, like those of the *Sarmatians*.



Col. 17



Col. 18

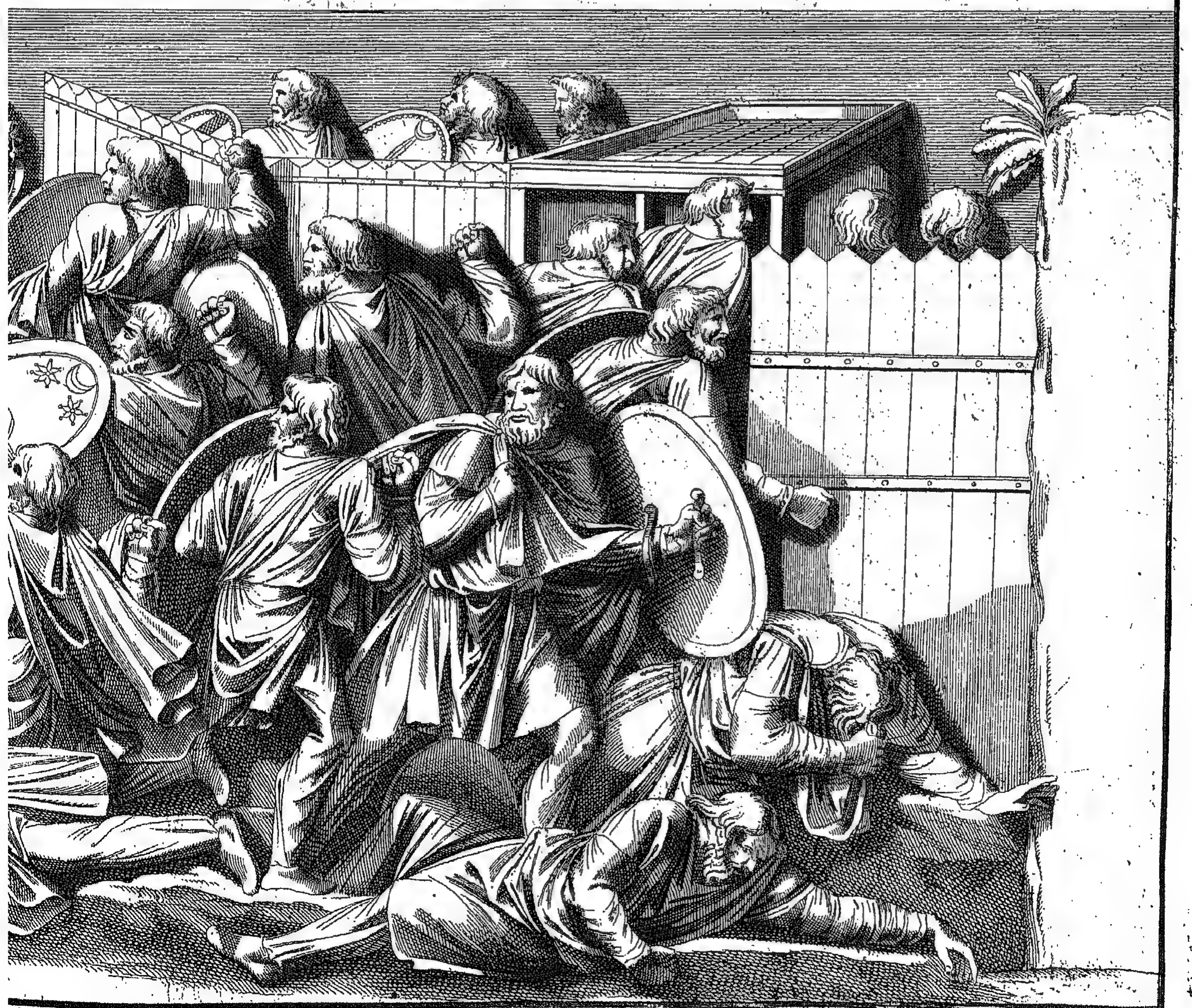


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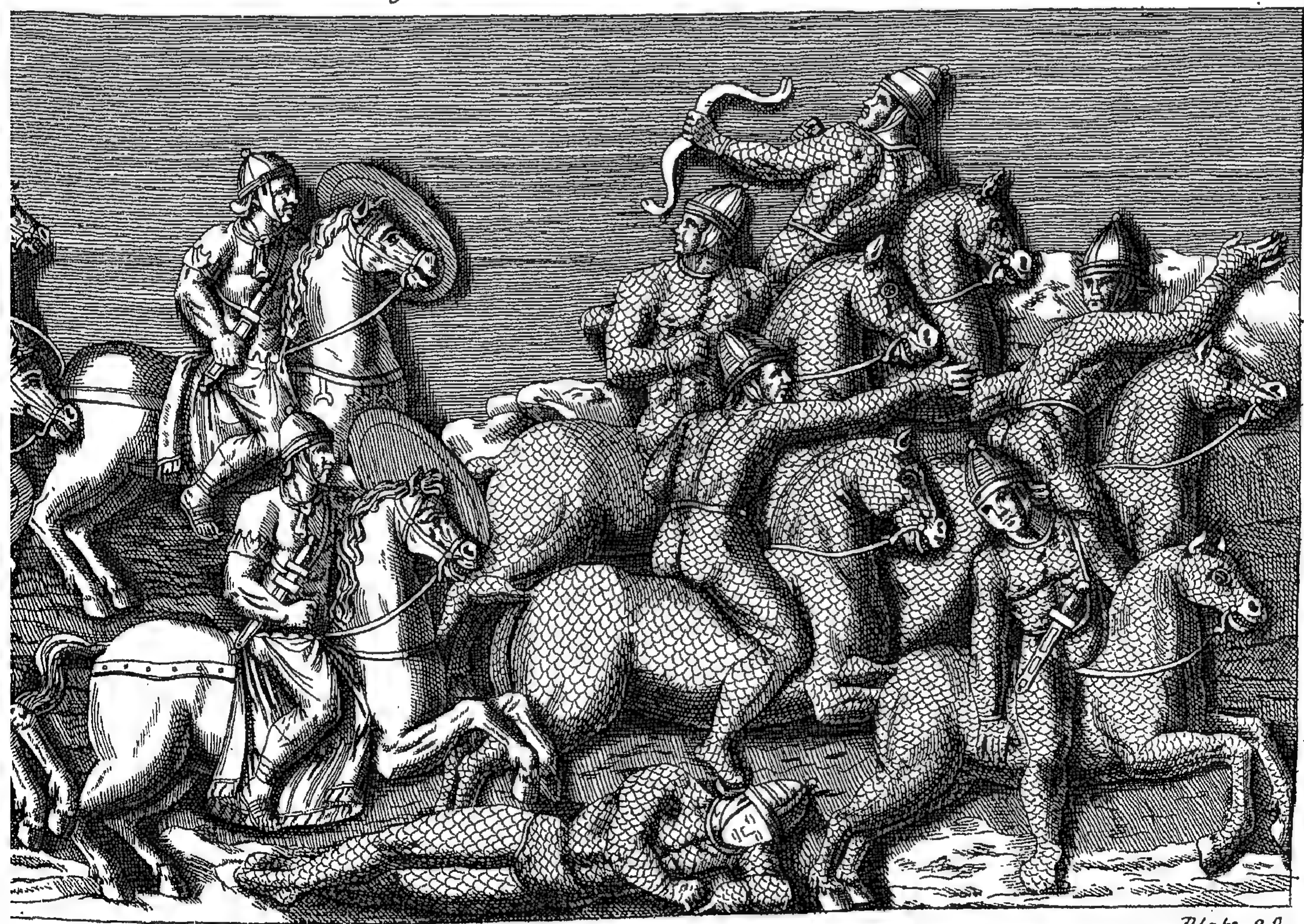


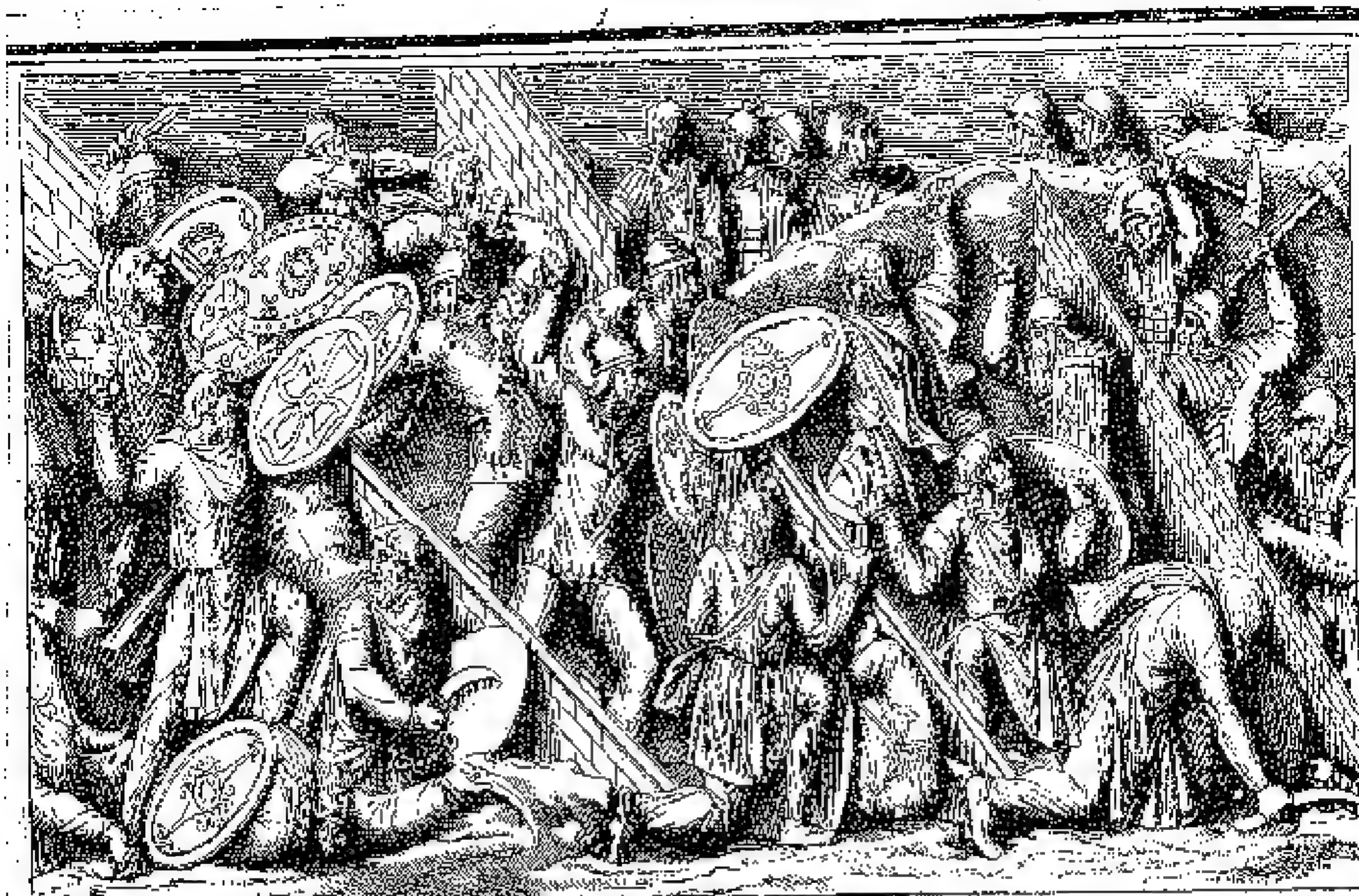






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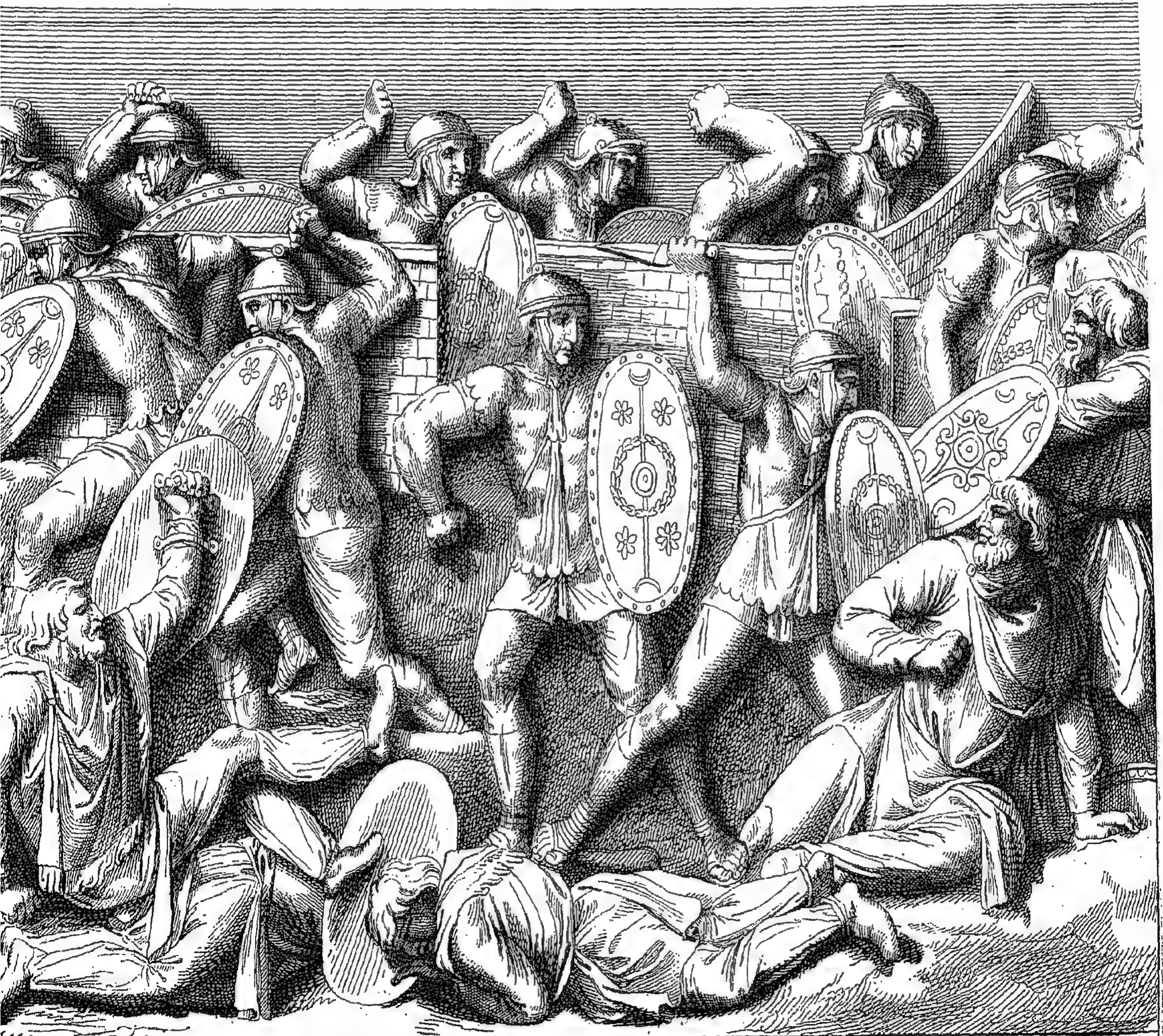


Col. Trayana





Col. Trajana



matians. Among the rest of the Soldiers here is one with a quantity of small round Stones in the Lappet of his *Chlamys* or Cloak, which he throws out of his Hand at the Enemy. The *Dacians* again fall in Heaps, without so much as one falling on the other side, according to Custom.

The Battle is also hot in the upper Image², where the *Dacians* fall by the Hands of the *Romans* and their Auxiliaries. We have likewise here among these one throwing Stones at the *Daci*, which he holds in his *Chlamys*.

The next Battle is fought in their Intrenchments¹, where the *Daci* seem to fight valiantly, and keep the Field: Many of the *Romans* also without doubt fell; but upon the Column there's not one kill'd. Two *Romans* fight the *Dacians* with Axes; and the *Dacian* Shields are the same as those of part of the *Roman* Infantry. PLATE XXI.

Here is yet another Battle² between the same Nations; but they exhibit nothing which has not been already observ'd.

C H A P. IV.

I. The Slingers. The Dacian Cavalry drowned. II. A Battle of the Cavalry of the Mauri. III. The Sarmatian Cavalry, Auxiliaries of the Daci. IV. The Sarmatians were also Auxiliaries of the Romans.

I. IN the following Battle³ the *Romans* appear with Ladders to force the Intrenchments of the *Daci*; but they find a warm Reception, the *Daci* fighting bravely, and throwing on them great Stones and Arrows. On the other side the *Romans* with their Slings pour upon them continually, and with their Shields lifted up receive the Showers of Stones from the Enemy.

In the next Image, the *Dacian* Cavalry flying before the *Romans*, betake themselves to a River¹, where many of them perish: Other *Dacians* on the opposite Shore lament their Misfortune, and lend their Assistance to save them, one of whom we see them drawing out of the Water, who had happily swam to the Shore. Two of the *Dacian Signiferi* carry the Dragon, their ordinary Ensign. PLATE XXII.

II. The next is a Battle of the Cavalry of the *Mauri*², commanded by *Lusius Quietus Maurus*, of whom mention has been made before, against the Infantry of the *Daci*, who march here as usual under the Ensign of the Dragon, but having got the worst of it, are retreating. All the Lances of the *Mauri* are fallen, as we said above, where we treated of their military Habit, and their way of riding. That these are the *Mauri* who came from *Africa*, appears plainly from their Equipment, their curl'd Hair, their Cavalier Habit, and their Horses without either Saddle, Bridle or Crupper; which also agrees with *Dion*, who says that *Lusius Quietus Maurus* went twice to War with the *Daci* with the Cavalry of the *Mauri*, and that he did great Service there to the Emperor *Trajan*.

III. The following Battle is between the *Roman* and *Sarmatian* Cavalry³, the last of which run away, but let fly their Arrows nevertheless after the manner of the *Parthians*. The military Habit of the *Sarmatians* is the most extraordinary one we have yet seen: For it's so closely adjusted to their Body from the Neck to the very Sole of the Foot, that all the Motions of the Members and Muscles appear as plainly through it, as if the Body was naked. 'Tis also cover'd all over with Scales without the least Interval, even as low as the Hand, and

down to the Sole of the Foot. The Horses are in the same sort of Habilliment, and have nothing uncover'd but their Ears and their Hoofs, the rest of the Head being all cover'd even below the Bits, the Nostrils excepted. The *Sarmatians*, besides the Bow and Arrows, have Swords of the same Shape and Length with the *Romans*. The *Roman* Horsemen, besides their Swords, had Lances, which are now fallen by reason of their Prominency from the Bass-Relief, as well as most of the Bows of the *Sarmatians*.

IV. We have already given, after *Pausanias*, a Description how the *Sarmatians* made their military Habit, which is very curious, and to which we therefore refer the Reader. These *Sarmatians* were Auxiliaries of the *Daci*, as others of the same Nation were of the *Romans*, who were also habited like these. In the early Days of the Republick the *Romans* had but few Auxiliary Troops in their Army; but the number of them in After-ages was always encreasing: And in the time of the Emperors they took them not only from conquer'd Nations, but from others also who were not under the *Roman* Empire. Of this number were the *Sarmatians*; whom we find mention'd in a Letter of *Marcus Aurelius* to *Cornelius Balbus*, related by *Spartian*, in these Words: 'You recommend, says that Emperor, *Pescennius* to me: I know him already, and have been assur'd by your Predecessor that he is a brave Man and honest, and distinguish'd himself in the War. In Acknowledgment therefore of his Services I have dispatch'd Letters to be read at the Head of the Troops, by which I give him the Command of three hundred *Armenians*, a hundred *Sarmatians*, and a thousand of our own.' What's remarkable in these *Sarmatians* is, that they took so much care in covering all the Parts of their Horses, that they even guarded their Eyes with a sort of scaly Stars, so that they could only see through the Intervals of the Rays of those Stars.

CHAP. V.

I. Another Fight; the Ballista. II. Heads cut off, and carried on the Breast. III. A Deity which perhaps is Hesperus. IV. A Roman Garrison attacked by the *Daci*.

I. IN another Part of *Trajan's* Column, there's a Battle of the *Roman* and *Dacian* Infantry in the Woods. On the side of the *Romans*, besides their own Men who are lightlier arm'd than the rest, there are Slingers from *Germany* or some neighbouring Nation, who carry Stones in the Skirt of their *Chlamys*. Some of these are naked down to the Waist, like some others we have already seen. In the Rear of the *Romans* there are auxiliary Troops, habited almost like the *Sarmatians*, and arm'd with Pikes. The *Dacians* fight with Swords, according to Custom, and have besides a sort of Machine to shoot great Arrows with, which they call'd *Ballista*, the Figure whereof shall be given below.

PLATE
XXIII.

II. The following Action appears to be one of the hottest; the *Roman* Infantry being accompanied with *German* Auxiliaries, who fight with Clubs, and are sustain'd by the Cavalry. Many Heads of the *Daci* are here cut off, one of which a *Roman* Soldier has fasten'd to his Cuirass before, and fights with it in that manner to terrify the Enemy: Two Horse-men also shew two more Heads to the Emperor, as an Instance of their Valour, and to induce him thereby without all doubt to reward it. The *Dacians* fight both with Bow and Sword, one of whose
Bows



Col. Antioch



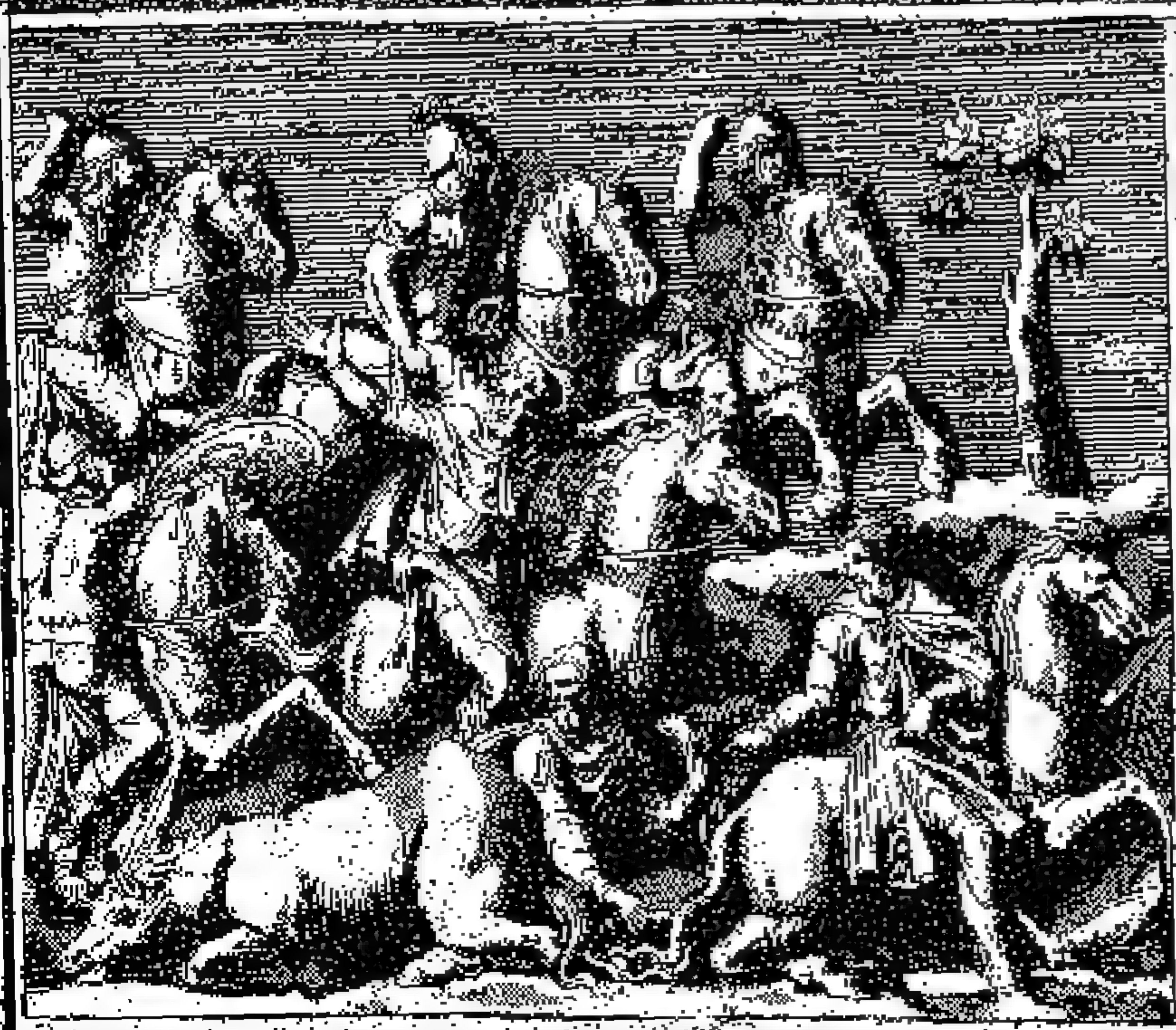
Col. Troy

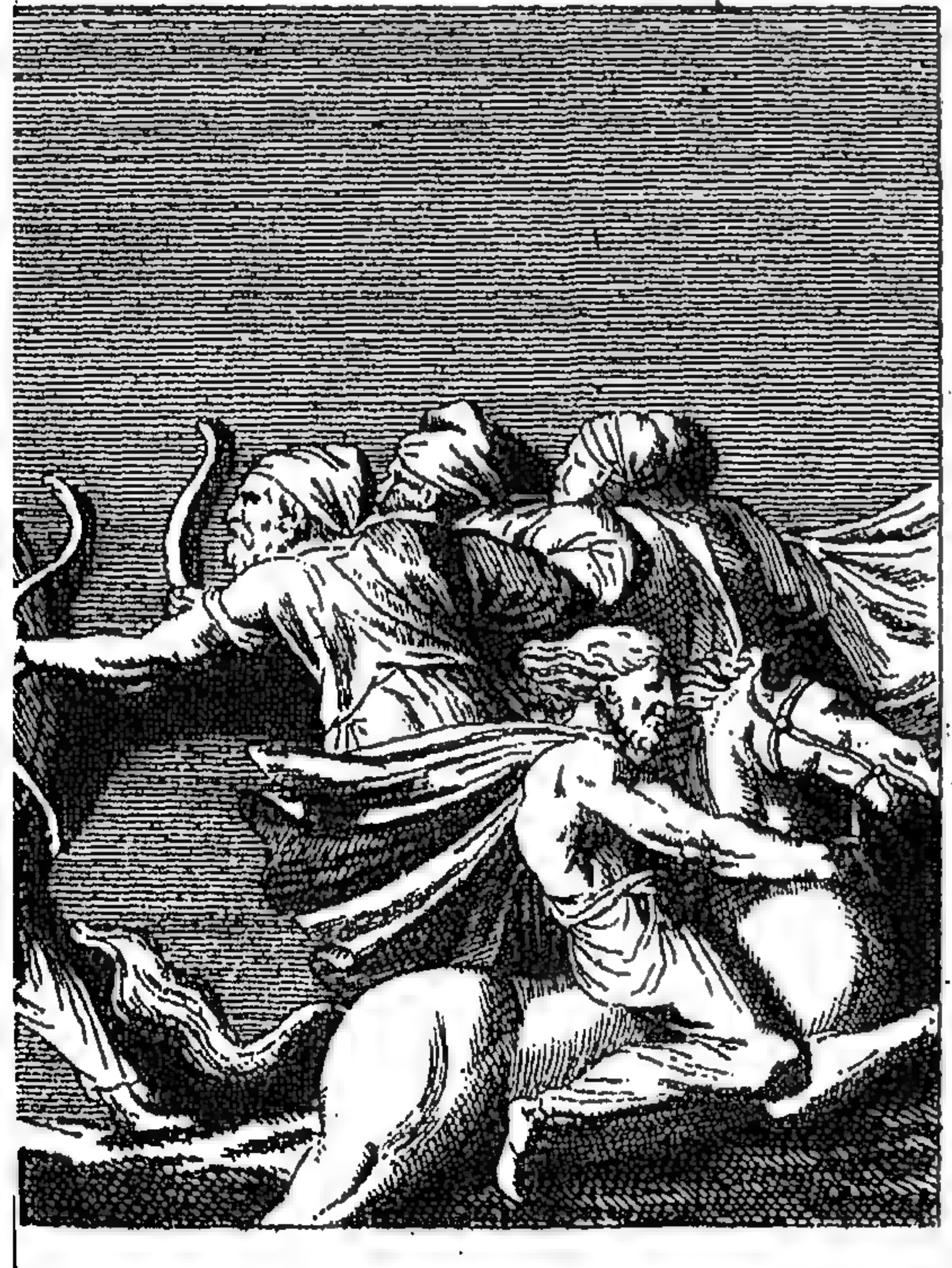


Col. Trajane

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Bows terminates in the Head of a Swan. Besides the Dragon, the ordinary Ensign of the *Dacians*, they have among them a Standard made after the *Roman* manner.

III. One may observe here a Figure in the Air, with a large Veil above its Head, as in one of the preceding Plates; but with this Difference, that there it is a Woman, whereas here it is a Man with a Beard, which some have taken for *Jupiter* coming to the Assistance of the *Romans*, which is by no means improbable. But forasmuch as that Woman with the great Veil advances her Head beyond it, and is therefore taken for *Aurora*, why may not this Man, who is represented in the very same manner, be suppos'd to be *Hesperus* or the Evening?

IV. Some *Romans*² in Garrison are vigorously attack'd by the *Daci*, and therefore make use of every thing to annoy them, pouring on them Stones and Arrows, and whatever comes next to hand. The *Daci* on the other hand cover themselves with their Shields to ward off the Blows.

CHAP. VI.

I. *The German Slingers dispute the passing of a River with M. Aurelius.* II. *Other Germans covered with their Shields, who maintain the other side of the River against him.* III. *Other Fights of the Roman Army with the Germans.* IV. *The Battles of the Romans with the Daci.*

I. **T**HE following Action³, taken from the Column of *Antoninus*, is remarkable. There the *Marcomanni*, the *Quadi* and other *Germans* dispute the Passage of a River with *Marcus Aurelius*, and pour Stones upon him from their Slings. These *Germans* have upon their naked Shoulders a *Chlamys* or *Pallium* which reaches down to their Mid-leg. A *Roman* Soldier also is here seen guarding the Head of the Emperor with his Shield from the Stones that are thrown.

II. In the next Image⁴ the *Germans* again dispute the Passage of a River with *Marcus Aurelius*, upon the Bank of which a great Party of them is g'd upon the Knee, and cover'd with their Bucklers. On the other hand a *Roman* Officer mounted upon an Eminence points out his Staff, perhaps to shew the Soldiers where the Passage was to be attempted, or else to parley with the *Germans*; which last seems probable enough, because there is one of them advanc'd before all the rest, and seems to parley with him. But this part of the Column is in very bad Condition, by what Accident I know not.

III. The following Battle⁵ has this in particular, that the *German* Archers are there engaging with others just like themselves, which the Emperor had taken into his Service out of their Country, and which, as has been said, was no uncommon thing in the *Roman* Wars. We have already seen the *Sarmatian* Cavalry fighting with the *Romans*, and shall see others by and by engag'd in the same War for the *Romans*. In this Image we may observe a *German* upon a Gallop embracing the Neck of his Horse.

In the next Image is represented a Battle between the *Romans* and *Germans*, who are both engaging as usual, and where the *Romans* have the better of it. Among other things there is a *Roman* Soldier leading a *German* Prisoner², with his Arms tied behind him. Among the *Germans* we may also observe a Man with a radiated Crown on, who is probably their King. Another *German* fights with

a crooked Sword after the manner of the *Dacians*, unless it be suppos'd that the *Germans* had auxiliary *Dacians* among their Forces.

3 In the following Image the Cavalry of the *Germans*³ is represented running away, and many of them falling, but not any of the *Romans*, tho' it's certain a
4 great many were kill'd in this War. In another Image⁴ there is again represented a Defeat of the *Germans*, where they are seen in their Flight with their Arms about the Necks of their Horses.

5 In the next Battle⁵ the *Germans* are invested before and behind, and appear to be but a small number in comparison of the *Romans* who encompass them. But this may be owing to their Ignorance of Perspective in those Days, and Deepnings, as they are call'd, so that they could not possibly represent a great number of Persons in one Action.

6 IV. In another Battle⁶ taken from the Bass-Reliefs of *Trajan*, the Emperor himself appears on Horseback fighting the *Dacians* with a Spear in his Hand. The Harness of his Horse is remarkable, the Neck being encompass'd with several Bands, and the Poitral which is the Skin of a Lion divided in two Parts, which meet and join upon his Breast, and shew the Lion's Mouth there wide open. The Soldiers shew the Emperor the Heads of *Dacians* cut off, as a Specimen of their Bravery; as they do also in another Battle, where they come off in like manner with the worst. In which Battle (the first in the next Plate) may be observ'd two Tents which terminate at the top in a Cone, and upon the Breast of the Horses the Crescent, as in the preceding Image; which Ornament is observable in the *Dacian* as well as the *Roman* Horses, as may be seen in the preceding Images. A *Roman* Soldier has here a Cuirass set with Scales almost like that of the *Sarmatians*.

PLATE XXV. In the following Image¹ is represented another Battle with the *Dacians*, where they are worsted as usual. In the next Image² the Emperor *Trajan*
1 crown'd by a *Victory*, presents a Globe to the City *Rome* standing by his side.
2 The City *Rome* is here habited in the same manner with another Image of her in our Cabinet, which we have represented in the first Volume. The *Calceamenta* of the Emperor, of the City of *Rome*, and other Figures, are here very remarkable.

3 The last Battle³ of the *Romans* we shall give, taken from *Constantine's* Arch, is likewise with the *Daci*, who are routed, according to Custom, by the *Romans*. In this Image the *Roman* Horsemen wear a Shield of a hexagon Figure, upon which is represented the Thunderbolt, denoting that this is the *Legio Fulminatrix*. Here also are *Roman* Trumpets, some crooked and some strait. But as to the Crescent upon the Breast of the Horses, it has been so often remark'd, that no further notice need be taken of it.

C H A P. VII.

I. *A Battle of the Amazons with the Greeks.* II. *Another Battle of the Amazons.*

4 I. **A**LL the Battles hitherto represented are *Roman*: But the next is a Battle of the *Amazons*⁴, taken from a *Roman* Marble. The military Habit of those they fight with shews them to be *Greeks*. 'Tis an Engagement of the Cavalry, among whom nevertheless we see the Foot in some places engag'd. The Habit of the *Amazons* is a short Tunick, which leaves one of the Breasts naked. Their



Londoner Arch



Londoner Arch

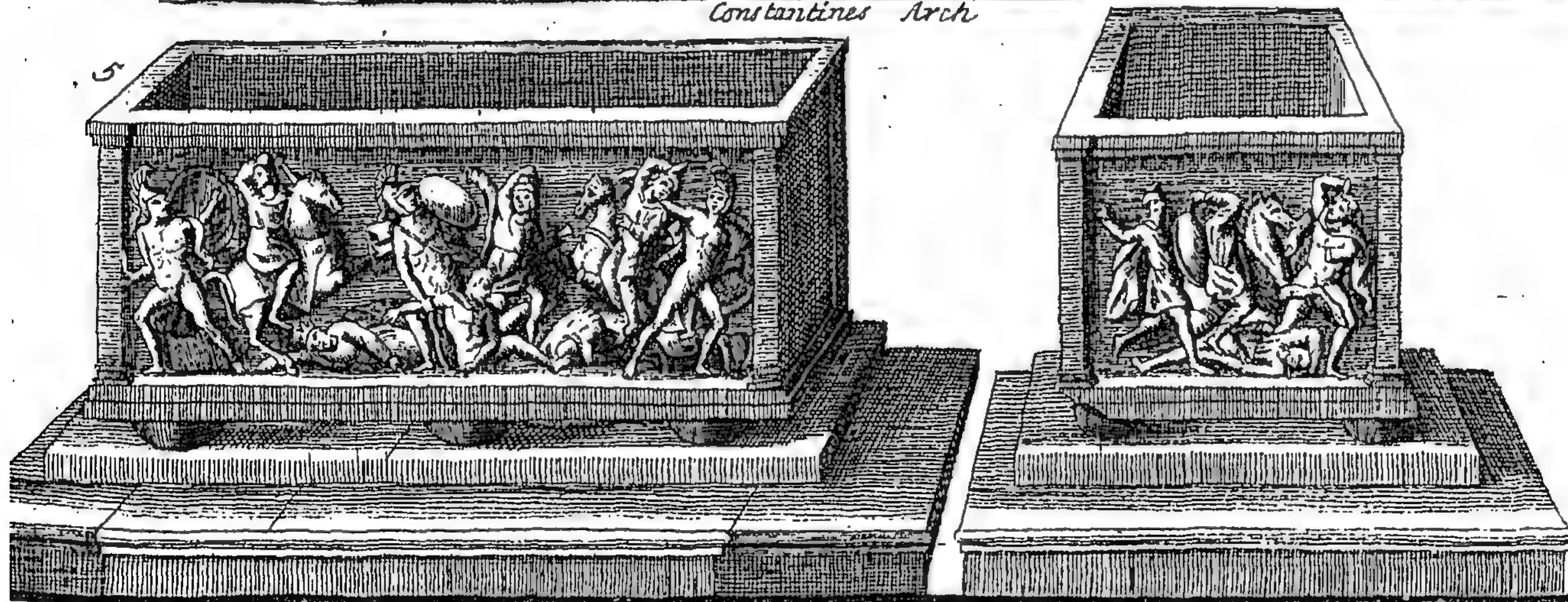


irble

3



Constantines Arch



Their Weapons are a half Pike and a Simitar, and their Shields are small and oval: Their Boots are of that sort which reaches only to the Mid-leg, and were anciently call'd *Campagus* or *Ocrea* by the *Latins*, and by the *Greeks* *αμπίς*. We see here neither the two-edg'd Ax, nor the Bow, nor Arrows, the ordinary Weapons of the *Amazons*; but this, as we have often observ'd, happens through the Disagreement there sometimes is between the Carvers and the Historians or Mythologists. Some of the *Greeks* here appear in a military Habit like those of the *Romans*, some all naked, except a Helmet, and some even without that. This Image represents the heat of the Battle, before Victory had declar'd for either Party, there being *Amazons* fallen on one side, and *Greeks* on the other. 'Tis observable that the Poitral of the *Amazonian* Horses is the same with what we have seen before upon *Trajan's* Horse and others, that is, the Skin of some Beast divided into two Parts, and join'd at the Head upon the Horse's Breast, as may be seen in the Image.

This probably is the Battle which the *Amazons* fought with *Theseus* and the *Athenians* after their Arrival in *Attica*, the History of which may be seen in *Plutarch's* Life of *Theseus*. This Image was grav'd at *Rome* in 1559, by *Nicholas Beatrice Lorrain*, from a Marble Sepulcher in the Capitol.

II. In a Monument at *Vienna* in *Austria*, the same Battle of the *Amazons* is represented; but they are there arm'd with two-edg'd Axes, and oval Bucklers: Their Saddle is also a piece of Stuff, which joyning before serves at once for Poitral, Saddle and Housling: Their Horses have no Bridle, but this may be occasion'd through the Injury of time; tho' if we consider the Mouths of the Horses, it does not appear there ever were any.

C H A P. VIII.

I. *The military Order of the Greeks, and what Authors have described it.* II. *The Division of the Infantry into three sorts.* III. *The different sorts of Cavalry among the Greeks.* IV. *The Phalanges.* V. *The Macedonian Phalanx.* VI. *Other sorts of Troops among the Greeks.*

I. **T**HE Images exhibited above of Battles, give us but an imperfect Idea of the manner of the Ancients in the Disposition of their Troops, and Order of Battle, by reason of the small number of Combatants engag'd on each side. *Ælian* however has left us a whole Book upon this Subject, wherein he has treated of the Order of an Army, and the Disposition of the several Parts of it. This also has been done by Writers before his time, as *Stratocles*, *Hermias* and *Fronto*, or as others read it, *Frontinus*, who all wrote upon the Subject of military Order, as it appears in *Homer*. But *Æneas* has most amply treated of the Order of Battle, and writ several Books upon the military Art, which were afterwards abridg'd by *Cineas* the *Thessalian*, some of which Books yet remain. *Pyrrhus* King of *Epirus* left also a Book upon the military Art, as did likewise his Son *Alexander*, and *Clearchus*, and besides them *Pausanias*, *Evangelus*, *Polybius*, *Eupolemus*, *Iphicrates*, *Posidonius* the Stoick, and *Bion*. But all these Authors Works are lost, except *Ælian's* Book, which happens to be preserv'd entire; besides which there is indeed another Writ by *Arian*, but maim'd and imperfect in many places. These two Writers however have describ'd the military Order of the *Greeks*, the

Division of their Troops into different Parts, the manner of composing their *Phalanx*, the different sorts of Battalions and Squadrons, and the Disposition of their Armies into Battle-array, as the Ground and Occasion serv'd. But then they are general Rules which these Authors give, and by Consequence changeable at certain Conjunctions; so that it will be difficult to meet with any Battle in History, where the Armies were rang'd in all Respects according to these Rules: For Time, Place, and the Condition of the Enemy the *Greeks* had to encounter, oblig'd the Generals to a different Disposition of the Army according to those different Circumstances.

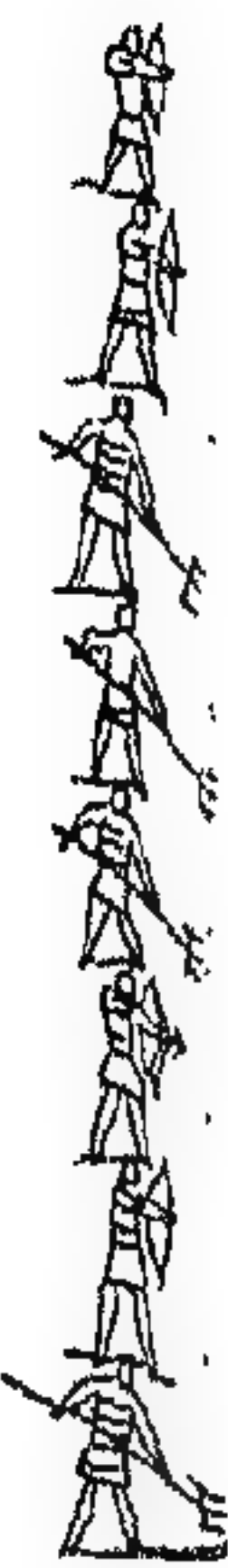
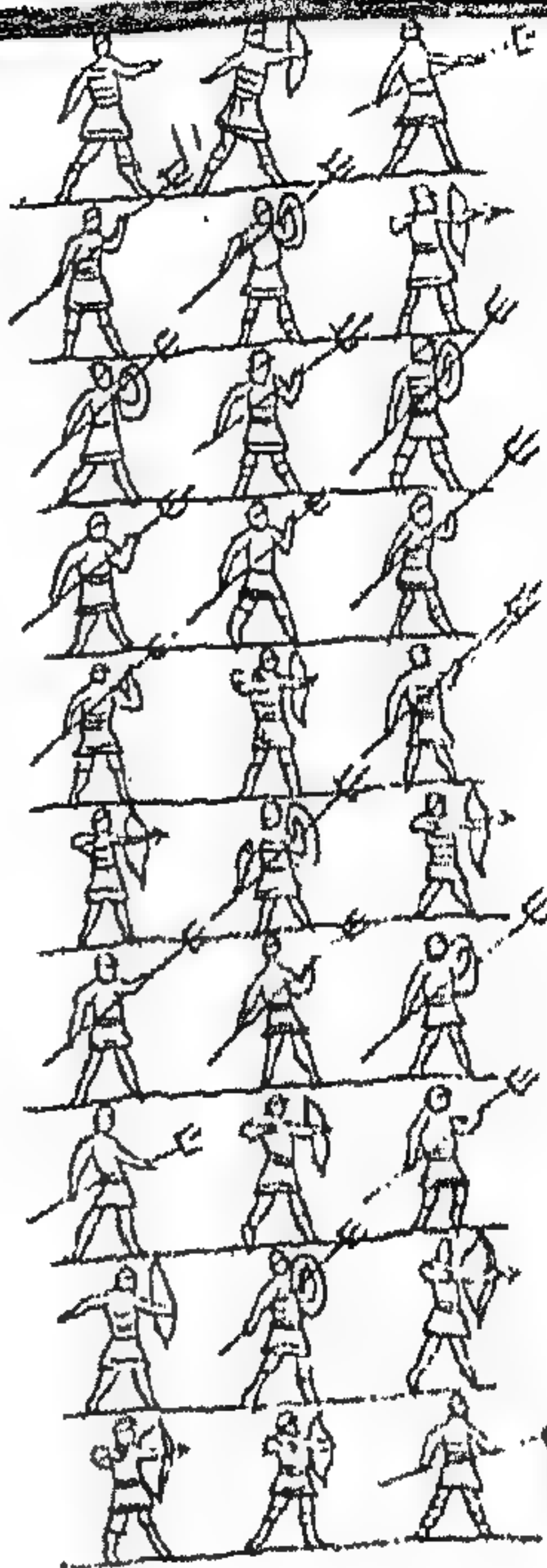
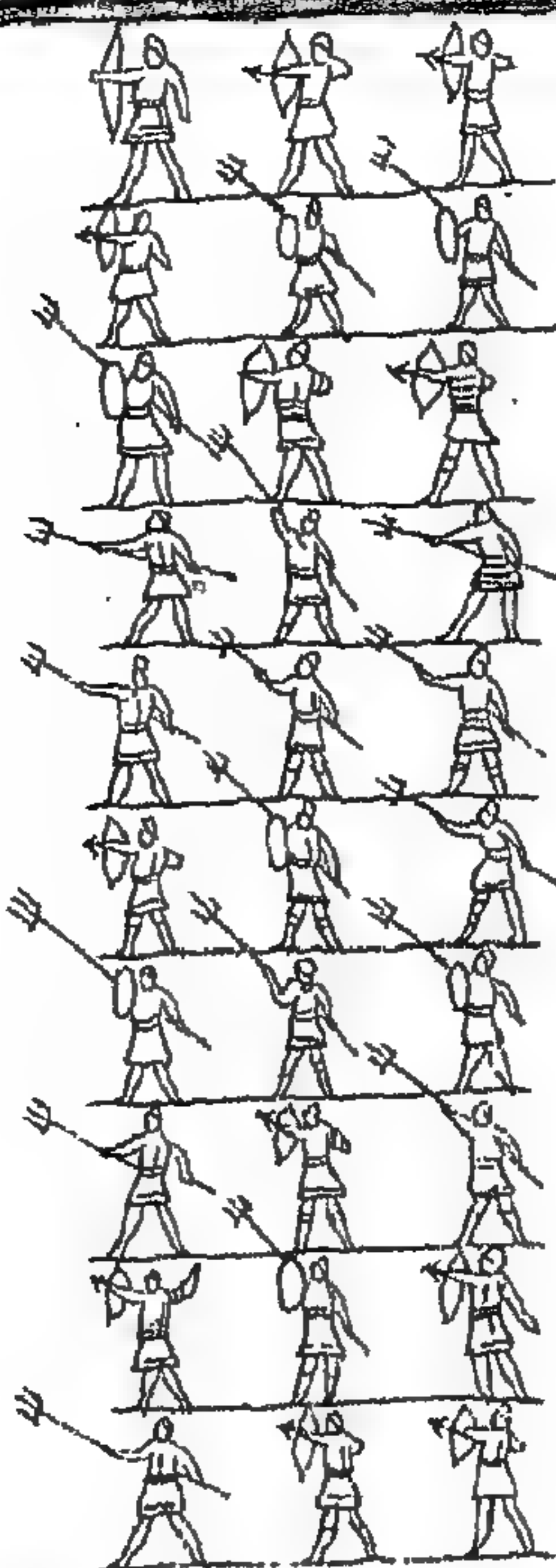
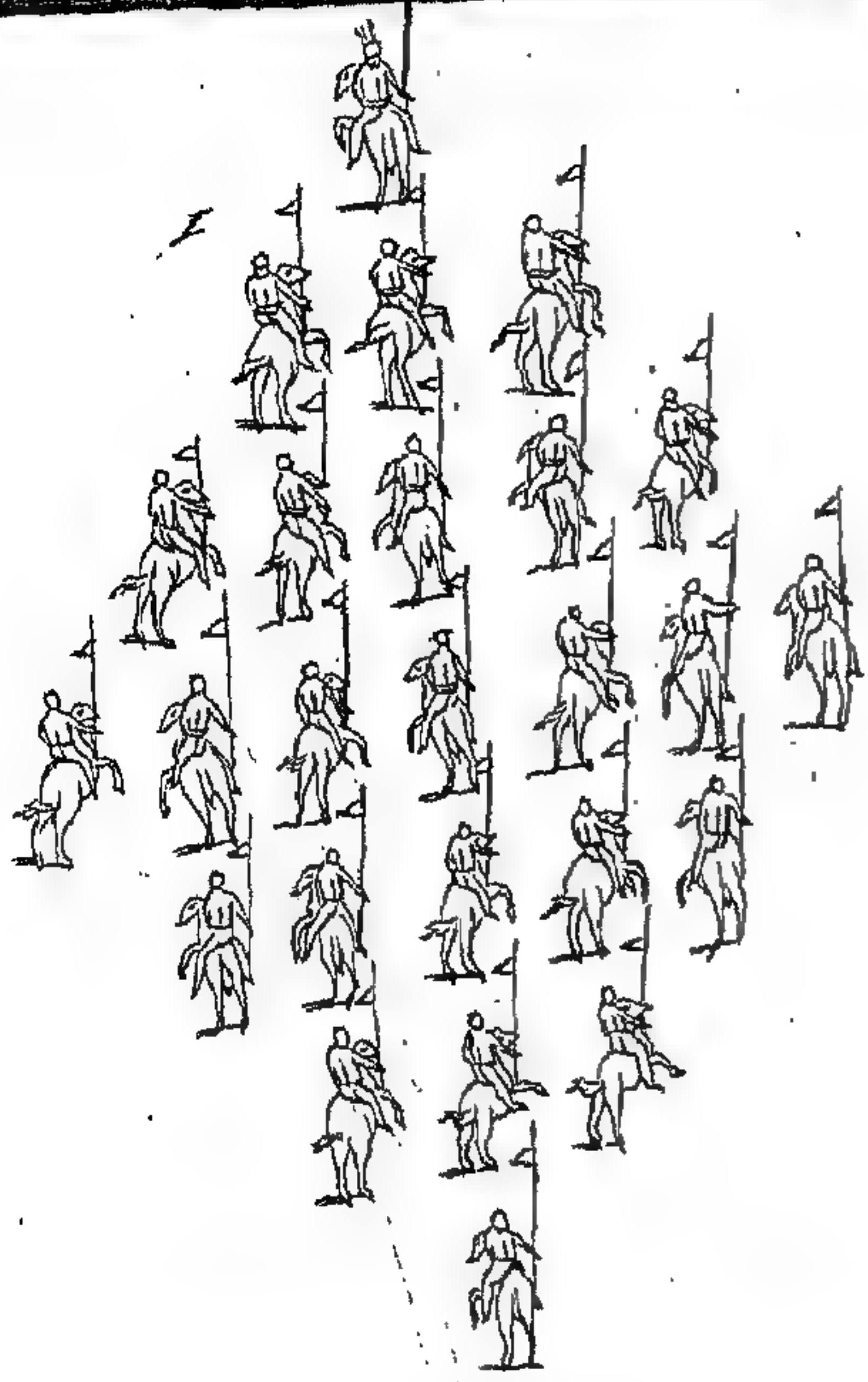
II. The Infantry was divided into three sorts; the first those with the heavy Armour; the second those that were arm'd with the *Peltæ*, and were therefore call'd *Peltastæ*, and the third the Men with light Armour. The first they distinguish'd by the Name of *Hoplitæ*, and had large round Shields, and Pikes of a great Length, after the *Macedonian* Fashion, call'd *Sarissæ*. The *Peltastæ* were a kind of middle sort between those with the heavy, and those with the light Armour, and took their Name from the *Peltæ* they were arm'd with, which were little Shields for the most part, in the form of a half Moon: In this Class it was that the *Argili*, as they were call'd, had their Station, who with the *Peltæ* had also short Lances. The last sort or light-arm'd Men, had neither Cuirass, Shield, or Boots, but fought at a Distance with Stones and Darts.

III. The same Difference was also observ'd in the Cavalry, among which were those with heavy Armour, call'd *Cataphracti*: These had Cuirasses on, as had also their Horses, with which they were cover'd all over: But the light-arm'd Men in the Cavalry had nothing of all this, but fought with Lances or Javelins, which they could dart at some distance, and had the Name of *Tarentini*: Among these there were some, who, after the second or third Javelin thrown, would come to close Fight.

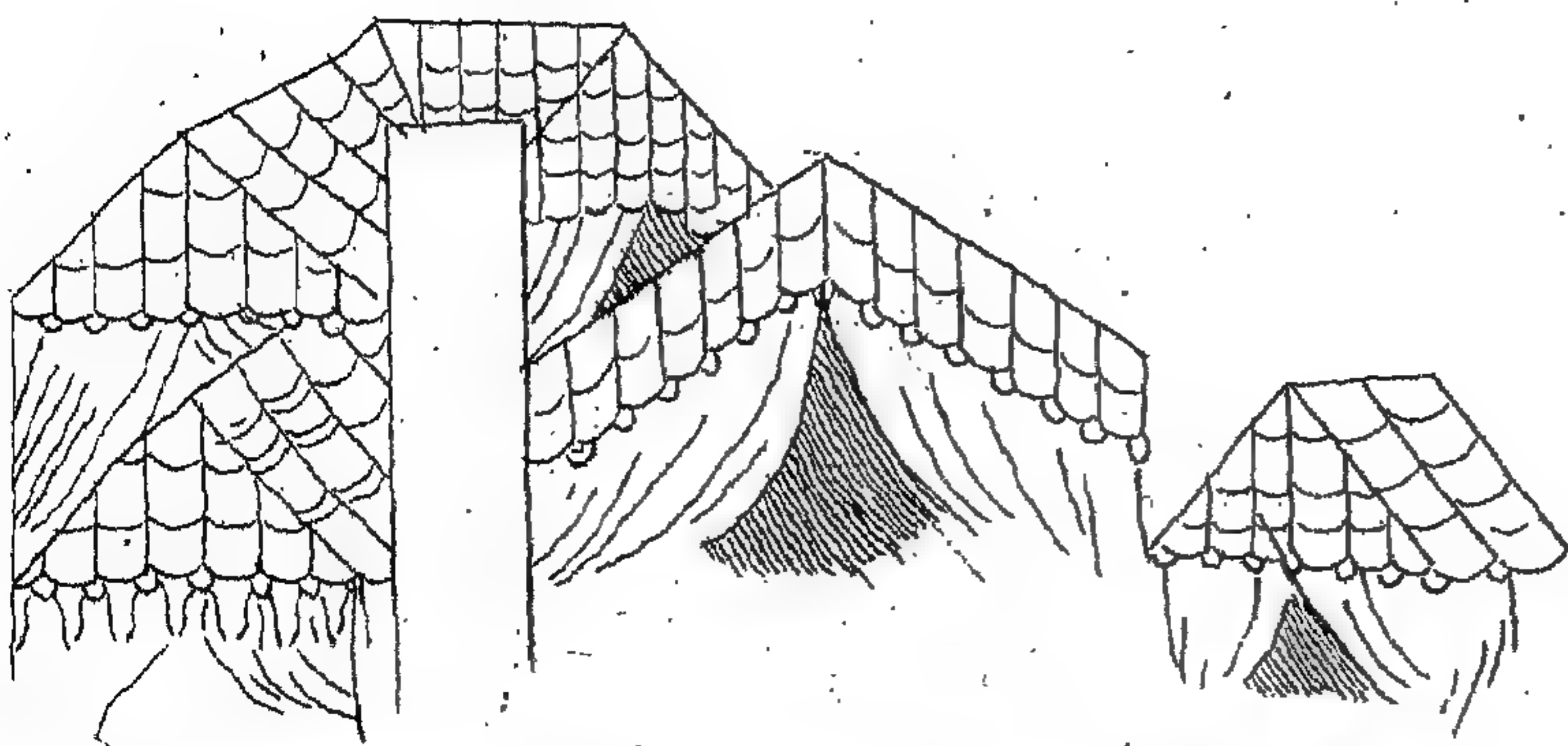
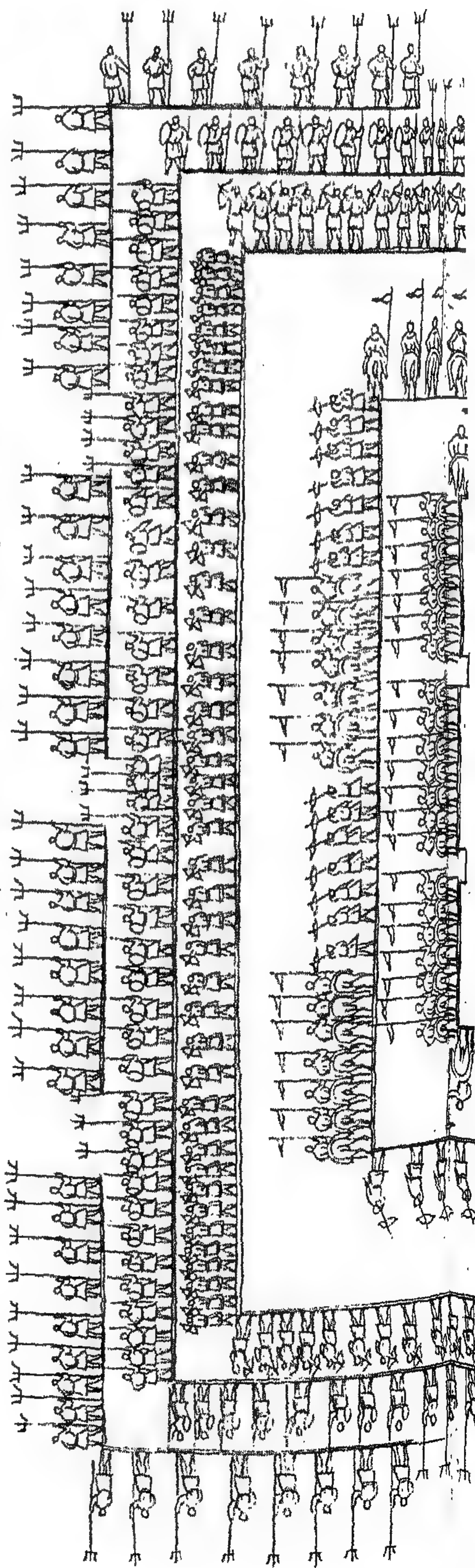
IV. The heavy-arm'd Infantry was plac'd in the Front of the *Phalanx* or Army, and the light-arm'd and Cavalry in the Rear; tho' in some Cases these also made the Front of the Army. The *Phalanx*, among the *Greeks*, was the same with our Brigade at this Day; and was greater or less in proportion to the number of Troops in the Army: The Authors of the *Tactics* make it consist of 16384 Men. Each *Phalanx* was sub-divided into several Parts or Bodies, every one of which had its commanding Officer. They always took care also to place the bravest in the Front, which Station was accounted the Post of Honour.

V. Among the several *Phalanges*, the *Macedonian* one was in greatest Esteem. There the Space between the Files of the Men with heavy Armour, was two Cubits: Their *Sarissæ* or long Lances were sixteen, or as others will have it, fourteen Cubits long, two of which were taken up with the two Hands, so that there were at least twelve Cubits advanc'd toward the Enemy. The Lances or Spears of the six first Ranks were all of a length, so that those of the sixth Rank advanc'd beyond the first Rank two Cubits, those of the fifth four Cubits, those of the fourth six Cubits, those of the third eight Cubits, and those of the second ten. Thus was the whole *Phalanx* thick set with Pikes advancing forward in proportion to the Distances of the Ranks from each other. The following Ranks had no *Sarissæ*, the Reason of which was, that the Points of them would have terminated within the *Phalanx*, and by consequence have endanger'd their own Men in the foremost Ranks. The Ranks of the *Phalanx* were sometimes very close and thick, and the Shields advanc'd above their Heads, so as to touch one another, by which means they form'd a kind of Parapet, which cover'd the whole Battalion, and conceal'd it from the View of the Enemy.

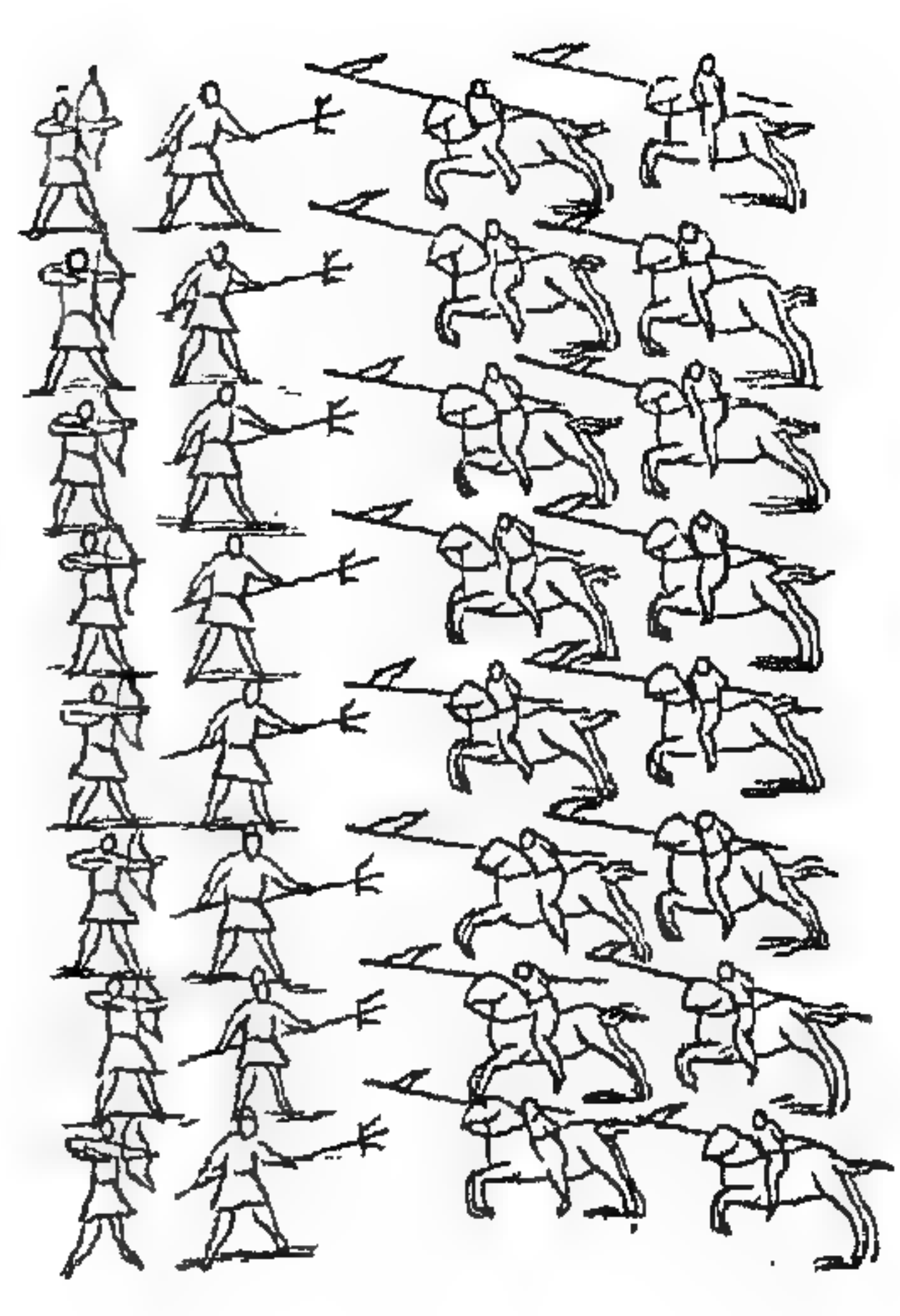
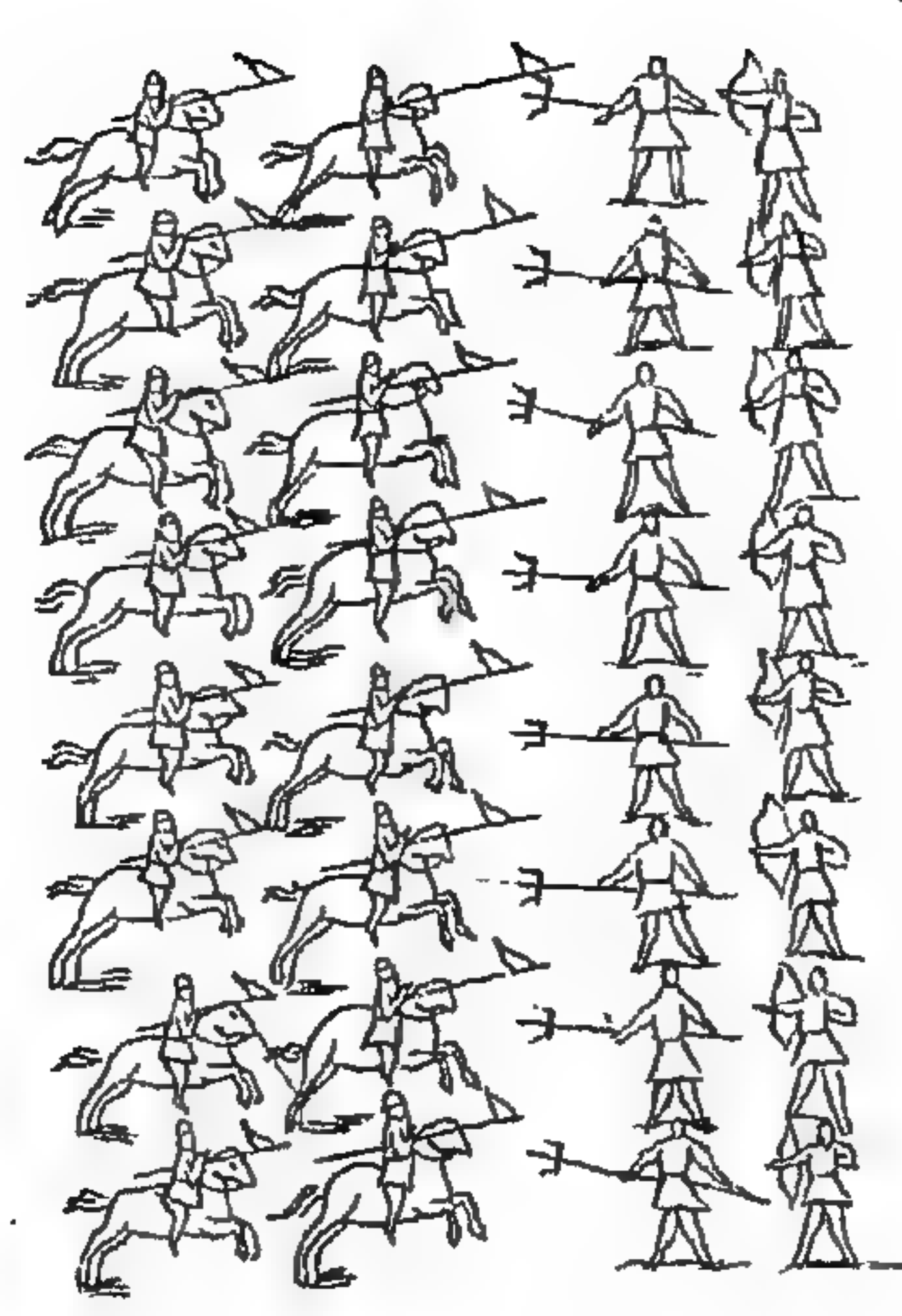
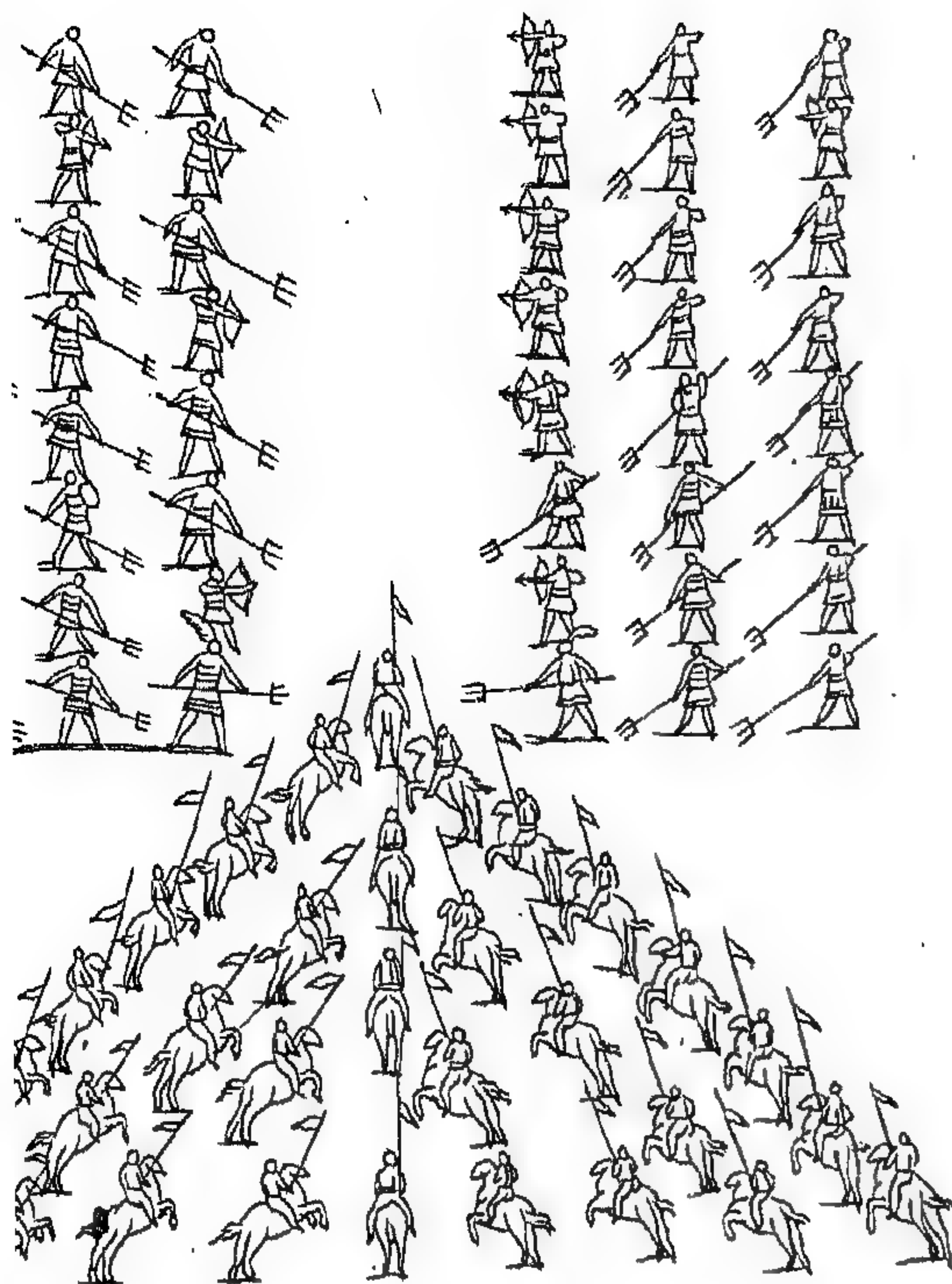
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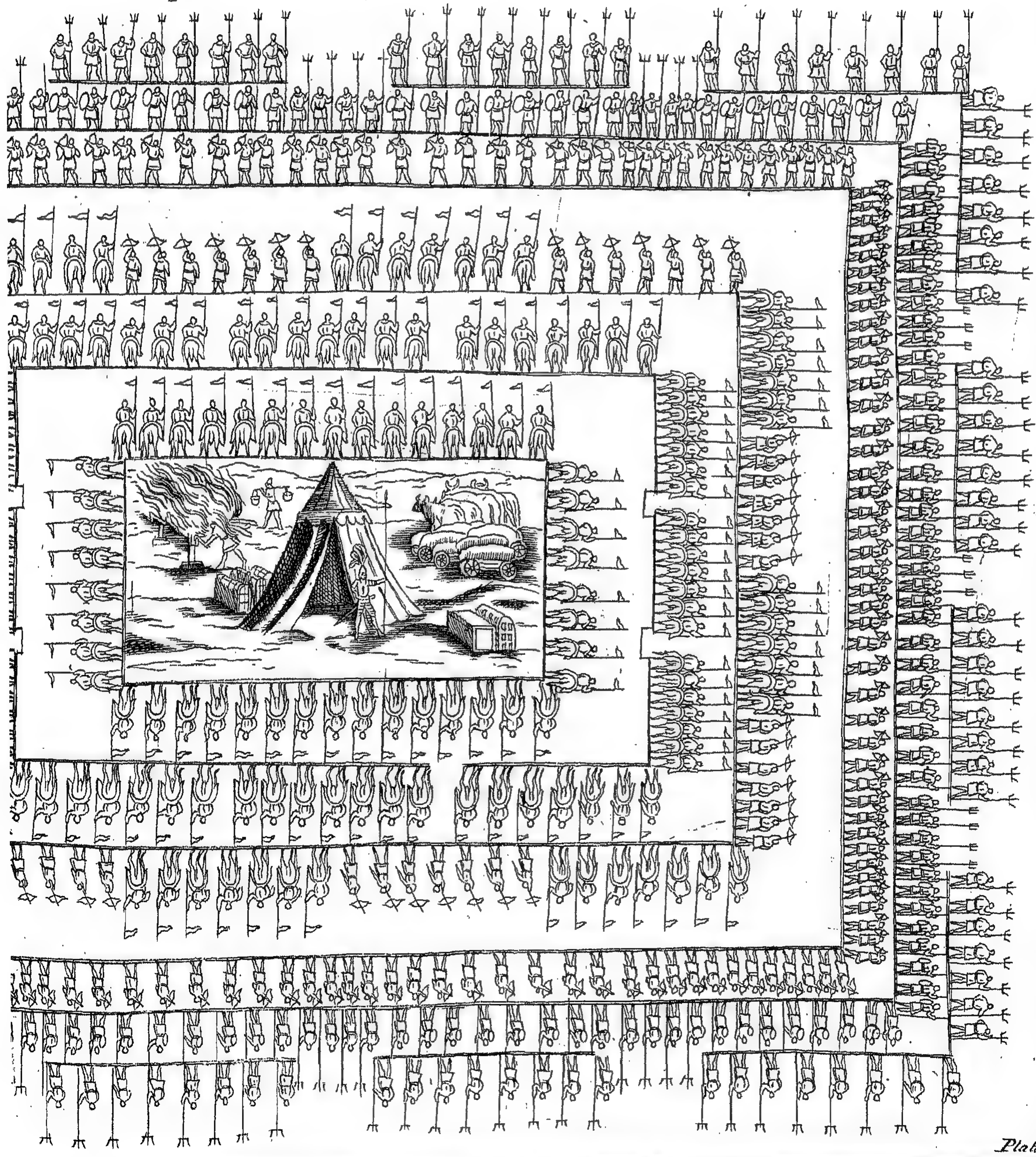
Trajanic Pillar



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4



VI. The light-arm'd Men were dispos'd of as the Condition of Affairs requir'd, that is, sometimes at the Head of the *Phalanx*, sometimes in the Rear, and sometimes mix'd among the Ranks in such a manner as that there was first a Rank of heavy-arm'd, then a Rank of light-arm'd Men, and so on in that Order.

The *Greeks* rang'd their Cavalry into Squadrons, sometimes of an oblong Square PLATE XXVI. as at this Day. The *Theffalians* had a peculiar way of ranging their Troops into Squadrons, invented by *Jason*: For they dispos'd them in Form of a *Rhombus*¹ or Pane of Glass, so that there was but one Man in front to face the Enemy. 'Tis not easy to understand the Advantage of such a Disposition; tho' *Ælian* says it was done for the more commodious facing about of the Troops to what side they pleas'd.

The *Persians*, *Sicilians*, and many of the *Greeks* form'd their Squadrons into an exact Square; the last of which however preferr'd the Squadron whose Front was equal to twice the Depth, to all other Forms.

C H A P. IX.

- I. *Chariots with Scythes used by several Nations.* II. *Elephants used in War.*
 III. *Phalanx's with two Fronts.* IV. *Squadrons of Horse drawn up in a Triangle.* V. *The Figure of a Square Battalion, according to Ælian.*

I. **T**HE *Greeks*, as well as many other *Asiatick* Nations, made use of Chariots with Scythes, as did also the *Gauls* and others; which sort of Chariots rather terrified, than did any great Execution upon the Enemy. For *Alexander* the Great taught the *Macedonians* how to avoid the Danger of them: And *Scylla's* Army engaging with *Archelaus*, who brought with him a great number of those Chariots, easily avoided them all, by closing in on the sides of them, and leaving an open Passage for their Course, setting up at the same time great Shouts at each Chariot, and crying as they pass'd *ad alium*. These Chariots had large pointed Scythes at each *Axis*, so that when they rush'd upon the Enemy with full Career they might easily do a great deal of Mischief to those that had not the Art to avoid and give them way.

II. Most of the Eastern Nations made use of Elephants in their Wars, whose Backs they loaded with Towers fill'd with armed Men; which Custom the *Greeks* afterwards follow'd. *Pyrrhus* had them in his Army when he made War upon the *Romans*; and of great Service these Animals were to him: for they having never been seen at *Rome* before, the sight of them struck such a Terror into the *Romans*, that the first Battle he won was in a great measure owing to them. But the *Romans* after that time became better acquainted with those bulky Animals, and often beat those who made use of them, and among the rest the *Carthaginians*.

III. They sometimes so dispos'd the *Phalanx*, as to face two ways at once, that they might the better receive the Enemy when they attack'd them in Front and Rear. In this Form the *Phalanx* is seen in the following Image², engaging with two Squadrons of Horse.

IV. When a Squadron³ drawn up in Form of a Triangle attack'd a *Phalanx*, in order to break it in the middle, the *Phalanx* then divided it self into two Parts, leaving a Space between, so that the two Bodies thus separated fac'd each other;

and this they did, that, if the Squadron should penetrate into that Interval, they might attack it in Flank from both sides. *Philip of Macedon* is said to have been the first that invented this triangular Squadron, by the *Latins* call'd *Cuneus*, and by the *Greeks* ἐμβολῆ; and that in the front Angle they plac'd their stoutest Men.

- 4 V. We have here given the Form of a square Battalion, as *Ælian* represented it at the end of his Book of the military Art. There a whole Army is rang'd in this square Form, and is compos'd of four Fronts; in the first and second Rank of which are the Pikemen, and in the third the Archers. Behind these three Ranks there's left a large Interval, in which the Cavalry is rang'd in three Ranks, as the Infantry is; only the Ranks are shorter, and diminish all along in Proportion to the Space. This Cavalry, however, which is intermix'd in the first Rank with Pikemen and Archers, leaves notwithstanding a sufficient Space in the Center for Oxen, Victuals, Ammunition and a large Tent.

Ammianus Marcellinus says, that *Julian* the Apostate, when he enter'd the Territories of the King of *Persia*, rang'd his Army into square Battalions, that he might march with greater Safety in the Enemy's Country.

The large square Battalion we have been describing, is perhaps nothing more than a Figment of *Ælian's* Brain, which never was in being; but it may for all that give us some Knowledge of the manner of the *Greeks* in drawing up their Armies. We meet with frequent mention of Armies rang'd in Battle-array, both in *Greek* and *Roman* History, where the Order of Battle is seldom the same; the reason of which, as we have already observ'd, is, that the Generals were oblig'd to range them differently, according to the Nature of the Place, and other Circumstances.

CHAP. X.

I. The Battle of Antiochus King of Syria with Scipio Asiaticus; and the Victory of Scipio and the Roman Army.

AMONG all the Battels of the Ancients, I have made choice of that between *Scipio Asiaticus* and King *Antiochus*, that is, of the *Romans* with the *Greeks*, where *Livy* describes the Order and Disposition of both Armies with great Exactness. His Account is as follows.

' After that, both Armies had laid quiet two Days, neither of them going over
' the River; on the third Day the whole Army of the *Romans* pass'd it, and
' encamp'd about two thousand five hundred Paces from the Enemy. As they
' were pitching their Camp, and employ'd in the Fortification of it, three thou-
' sand choice Men of the King's Army, Foot and Horse, came and pour'd upon
' the advanc'd Guard with great Impetuosity. The Guard happen'd at that time
' not to be so strong as usual, the number not exceeding two thousand; yet this
' Number alone, without calling for Help from the Works, sustain'd the Shock,
' and not only kept the Battle upon equal Terms, but redoubling their Vigour,
' at last repuls'd the Enemy, a hundred of which were kill'd upon the Spot, and
' about the same number taken Prisoners.

' During the four following Days the Armies kept within their Intrenchments;
' but on the fifth Day the *Romans* march'd out upon the Plain, and offer'd to
' give them Battle: *Antiochus*, however, did not move forward at all, tho' the
' Front

‘ Front of the *Roman* Army was at most not above a Mile from his Intrenchment.
 ‘ The Consul therefore, seeing the Enemy decline to join Battle, call’d the next
 ‘ Day a Council of War, to consult upon what was to be done if *Antiochus* would
 ‘ not give him an Opportunity of fighting: For the Winter was at hand, so that
 ‘ he must either keep his Soldiers in Tents, or go into Winter Quarters, and de-
 ‘ fer the War till the Summer after. The *Romans* never contemn’d an Enemy so
 ‘ much before, and therefore all cry’d out that he should lead them immediately
 ‘ and take Advantage of the Ardour of the Soldiers, who, as if they were not to
 ‘ engage with so many thousand Men, but rather were going to slaughter such a
 ‘ number of Sheep, were ready to attack them in their Trenches and force their
 ‘ Camp, if the Enemy would not come out to fight them. *Cneius Domitius*
 ‘ being sent to view the Ground, and how the Enemy were posted, and which part
 ‘ was most accessible to be attack’d, and having brought back Intelligence, they
 ‘ resolv’d next Day to move their Camp something nearer, and the third Day
 ‘ brought their military Ensigns into the middle of the Plain, and began to draw
 ‘ up the Army in Line of Battle.

‘ *Antiochus* upon this thought fit to delay fighting no longer, for fear he
 ‘ should discourage his Men and give Heart to the Enemy, and therefore march’d
 ‘ his Army out of the Camp, and so far advanc’d, as that it might appear he
 ‘ was resolv’d to engage. The *Roman* Army was almost all of one Form, both
 ‘ with regard to the Men, and their Arms; there were two *Roman* Legions,
 ‘ and two more of their Allies and *Latines*, each of which had in it five thou-
 ‘ sand four hundred Men. The main Body consisted of *Romans*, and the
 ‘ Wings of *Latines*. The *Hastati*, or Pikemen, were plac’d in the Front, and
 ‘ next to them the *Principes*, the *Triarii* bringing up the Rear. Beyond this
 ‘ compleat Army, as it were, on the right, the Consul placed near three thousand
 ‘ Auxiliaries belonging to King *Eumenes*, but mix’d with a Body of *Achæans* arm’d
 ‘ with short Bucklers, making an even Front with the main Body, and near three thou-
 ‘ sand Horse before them, eight hundred of which belong’d to *Eumenes*, the rest were
 ‘ *Romans*. The *Trallians* and *Cretensians* he plac’d in the Rear, in number five
 ‘ hundred. The left Wing did not seem to want such Aids, it being secur’d by
 ‘ a River, whose Banks were full of craggy Rocks: Yet there notwithstanding he
 ‘ plac’d four Troops of Horse. These made up the whole *Roman* Army, except
 ‘ two thousand *Macedonian* and *Thracian* Volunteers mix’d together, who were
 ‘ left as a Guard to the Camp. They placed also sixteen Elephants behind the
 ‘ *Triarii*, as a Body of Reserve: And this they did, both because they were not a-
 ‘ ble to sustain the Force of the King’s Elephants, which were four and fifty in
 ‘ number, and because the Elephants of *Africa* are even unequal to the same num-
 ‘ ber of *Indian* Elephants, as being neither so large nor so fierce as those.

‘ The King’s Army was more various, as being compos’d of several Nations,
 ‘ whose Arms and Persons were very different. Among these there were sixteen
 ‘ thousand Foot, arm’d after the manner of the *Macedonians*, which they call’d
 ‘ *Phalangitæ*. These made up the Center of the Front of the Army, and were
 ‘ divided into ten parts, between each of which were plac’d two Elephants, the
 ‘ whole Army from the Front inwards consisting of two and thirty Ranks. Now
 ‘ there was not only this Strength in the King’s Army, but it also created a Ter-
 ‘ ror by its Appearance, especially from the Mixture of Elephants among the
 ‘ armed Men. For besides that these were in themselves very bulky, they ap-
 ‘ pear’d yet more enormous and formidable by their Frontlets, Crests, and Towers
 ‘ upon their Backs, in which were four Soldiers and a Manager. On the Right
 ‘ of the *Phalangitæ* he plac’d fifteen hundred *Gallo-græcian* Foot, to which he
 ‘ join’d three thousand Horse in Armour, call’d *Cataphracti*, with a Wing of a-

‘bout a thousand other Horse, call’d *Gemea*. The middle of this Cavalry consisted of chosen Men of the same Nation, the rest being a mixture of different Countries together. In the Rear of these were plac’d sixteen Elephants, as a Body of Reserve, and on the same side, in a Wing somewhat longer than ordinary, was the King’s own Regiment, call’d the *Argyraspides*, from their having silver Shields. After these came twelve hundred *Dabæ*, who were Horse-Archers, and of light-arm’d Men three thousand, part *Trallians* and part *Cretans*, of both about an equal number; besides which there were two thousand five hundred more added to the Horse Archers; and in the Rear of that Wing four thousand *Cyrtean* Slingers and *Elymean* Archers all mix’d together. Thus was the right Wing compos’d.

‘In the left there were fifteen hundred *Gallo-græcians* added to the *Phalangitæ*, and arm’d in the same manner, and to them two thousand *Cappadocians*, sent from King *Ariarathes*; also two thousand seven hundred auxiliary Troops of different Nations mix’d together, three thousand *Cataphracti*, and a thousand other Horse. The Royal Wing, which was more lightly arm’d, and the Horses accoutred in much the same manner as those before, was compos’d of *Syrians*, *Phrygians* and *Lydians* mix’d together. Before this Cavalry were Chariots with Sithes, and Camels call’d Dromedaries, upon which sat *Arabian* Archers, arm’d with narrow Swords four Cubits long, the better to reach the Enemy from such a height. After this came a number of Troops equal to that in the right Wing; the first of which were *Tarentines*; the next two thousand five hundred *Gallo-græcian* Horse; then a thousand *Neocretans*, with fifteen hundred *Carians* and *Cilicians* in the same Armour, besides as many *Trallians*, and three thousand Men with short Shields, who were *Pisidians*, *Pamphylians* and *Lycians*, which answer’d to the like number of *Cyrteans* and *Elymeans* in the right Wing, and after these at a small distance sixteen Elephants. The King commanded the right Wing in Person, and committed the left to the Command of his Son *Seleucus* and his Nephew *Antipater*, and the main Body to *Minio*, *Zeuxis* and *Philip*, which last was Master of the Elephants.

‘In the Morning there arose a thick Fog, which, as the Day encreas’d, became a dark Cloud, and at last broke out into a great Rain, which very much incommoded the King’s Army, tho’ it did no Damage to the *Romans*. For their Army being small, the Darknefs did not hinder them from seeing quite round it; nor did the Rain do any hurt to their Swords or Javelins, for such were their Weapons, they being most of them heavy-arm’d Men. On the contrary, the King’s Army was so extensive, that they could not see the Extremities of it from the Center, and on the other hand the Rain that fell spoil’d their Bows, Slings and Thongs of their Darts. The Sithe-arm’d Chariots too, with which *Antiochus* thought to have put the Enemy in great Disorder, prov’d a Terror to his own Men. These Chariots were arm’d in this manner: Round about the Pole there were long Spears reaching about ten Cubits from the Yoak, not unlike Horns, with which they ran every every thing through that came in their way, and at each Extremity of the Yoak two Sithes, dispos’d in such a manner, that one was in a right Line with the Yoak, and the other plac’d a little lower inclining towards the Ground; the first to cut down all that came near the sides, and the last to reach those that were down, or stoop’d to avoid the other. In the like manner were two more Sithes fix’d upon the Axel-trees at each Extremity. The King therefore plac’d these Chariots in the Front of his Army, knowing well that if they were either in the Rear or Center, they could not come at the Enemy without cutting through his own Troops. *Eumenes* observing this Disposition, who was no Stranger to that sort of fighting, and considering how

how dangerous these Chariots must be even to their own Army, if once the Horses were put into Disorder, chose rather to scare and terrify them, than to attack them in a regular manner: To this end therefore he detach'd the *Cretan* Archers, Slingers and Darters that were Horse, and commanded them to fall upon them, not in a Body, but dispers'd, and to pour their Darts and Arrows on all sides. A Shower of Arrows were accordingly let fly at the Horses, which, together with the Cries and Shouts of different Voices, so terrified them, that they ran way as if they had no Driver. The light-arm'd Men, however, and Slingers and swift-footed *Cretans* dextrously declin'd their Violence, and then pursued them, by that Means encreasing the Terror of the Horses and Camels, the Clamour of the rest of the Troops contributing also at the same time thereto.

In this manner the *Quadrigæ* arm'd with their Sithes ran with full Career between the two Armies, and were driven out of the Field without any Damage. After which the Signal to Battle was given on both sides, and the two Armies at last fell to it in a regular manner. That ridiculous Course of the Chariots was, however, the Cause of the Defeat of the King's Army: For the auxiliary Troops which we plac'd nearest were so terrified at the Disorder of the *Quadrigæ*, that they likewise fled, and by that means drain'd that Wing of the Army to the *Cataphracti*, or Men arm'd *Cap-a-pee*, who being attack'd by the *Roman* Cavalry, did not so much as stand the first Shock, but fled as many as could, the rest falling under the Weight of their Arms. Thus did the whole left Wing give way; and the auxiliary Troops which were intermix'd with the Cavalry, call'd *Phalangitæ*, being likewise in Disorder, the Terror soon reach'd the main Body of the Army. Thereupon their Ranks were disorder'd by the flying of the other, so that the Use of their long Pikes, call'd by the *Lacedæmonians*, *Sarissæ*, was quite taken away by the crowding of their own Party, in which Condition the *Romans* attack'd them, throwing their Javelins in upon them while they were in such Confusion. Nor did the Elephants then at all terrify the *Romans*, they having been us'd to them in the *African* Wars, and learnt to avoid the Force of them, and either to wound them with their Javelins, or to cut their Sinews with their Swords whenever they could get near enough.

By this time the whole Front of the main Body was destroy'd, and the subsidiary Troops were so hemm'd in, that they also were cut to pieces, the Noise of the Defeat and Flight of these Troops reaching at the same time the other Wing of the Army, and almost the very Camp. *Antiochus*, however, who commanded the right Wing, perceiving the opposite Wing of the Enemy very much drain'd and thinn'd, and that there were no Reserves but four Troops of Horse, and those leaving the Bank of the River to betake themselves to the rest of their Forces, fell upon that part of the Army with his Auxiliaries and *Cataphracti*, charging them not only in Front, but flanking them too at the same time between the River and the Wing, until the *Roman* Horse first gave way, the Foot after their Example flying afterwards as fast as they could towards their Camp, where *M. Æmilius*, Tribune of the Soldiers, and Son to *Marcus Lepidus*, commanded, who, a few Years after, was made Sovereign Pontiff. This *Æmilius* seeing the *Romans* put to Flight, muster'd up all the Forces he could to stop them, which accordingly he did, and afterwards oblig'd them to rally and renew the Fight, reproving at the same time their Cowardice and dishonourable Flight: To this he also added Threats, telling them they ran upon their own Ruin, unless they obey'd his Commands, and gave at the same time the Signal to his Men to kill the first that offer'd to run away, and to force the rest back toward the Enemy. Hereupon they began to pause, to consider that the Danger of running away was greater than that of fighting the Enemy, and therefore

‘ at length fac’d about and return’d to the Fight: *Æmilius* also, with a Body of
 ‘ Reserve of two thousand brave Men, made a stout Resistance against the King, who
 ‘ was in hot Pursuit of those who fled: *Attalus* also on the other hand, Brother to
 ‘ *Eumenes*, perceiving from the right Wing, which at the first Attack had routed the
 ‘ left of the Enemy, how his own Party fled on the left, and what a Tumult
 ‘ there was all about the Camp, came seasonably to their Relief with two hundred
 ‘ Horse. *Antiochus* seeing fresh Recruits coming to their Aid, both from the
 ‘ Camp, and main Body of the Army, together with those that had lately turn’d
 ‘ their Backs, was so dishearten’d, that he turn’d about his Horse and fled.

‘ The *Romans* thus becoming Conquerors of both the Wings of the Enemy,
 ‘ march’d through Heaps of Slain, (especially those that fell in the main Body of
 ‘ the Army, which were by far the most, the Battle being there hottest, and the
 ‘ Men not so well able to fly, by reason of the Weight of their Armour,) and went
 ‘ directly to plunder and pillage their Camp. At the same time the Cavalry of
 ‘ *Eumenes* first, and after them the *Roman* Horse, pursued the Enemy quite out of
 ‘ the Field of Battle, killing all along as many as they came up with. But the
 ‘ greatest Slaughter of all that attended the King’s Army in their Flight, was the
 ‘ Disorder occasion’d by the Chariots, Elephants and Camels, which ran blindly
 ‘ through their own Party, and kill’d and trod down all before them. Nor was
 ‘ the Slaughter in the Camp less than that in the Field of Battle: For the Troops
 ‘ that first run away, betook themselves chiefly to the Camp, where, trusting in
 ‘ the Strength of the Forces that were in reserve, they fought with more Resolu-
 ‘ tion than they had done before. The *Romans* also, provok’d at their being
 ‘ stop’d by the Gates and Bulwarks longer than they expected, in Revenge made a
 ‘ more grievous Slaughter of them, when they had forced the Camp. ’Tis said there
 ‘ were kill’d on that Day fifty thousand Foot, and three thousand Horse, fourteen
 ‘ hundred taken Prisoners, and fifteen Elephants with their Conductors.
 ‘ The Loss on the *Roman* side, however, was very inconsiderable; for there fell
 ‘ not of them above three hundred Foot, and nine and forty Horse, five and
 ‘ twenty of which were *Eumenes*’s Men, and besides these some few wounded.

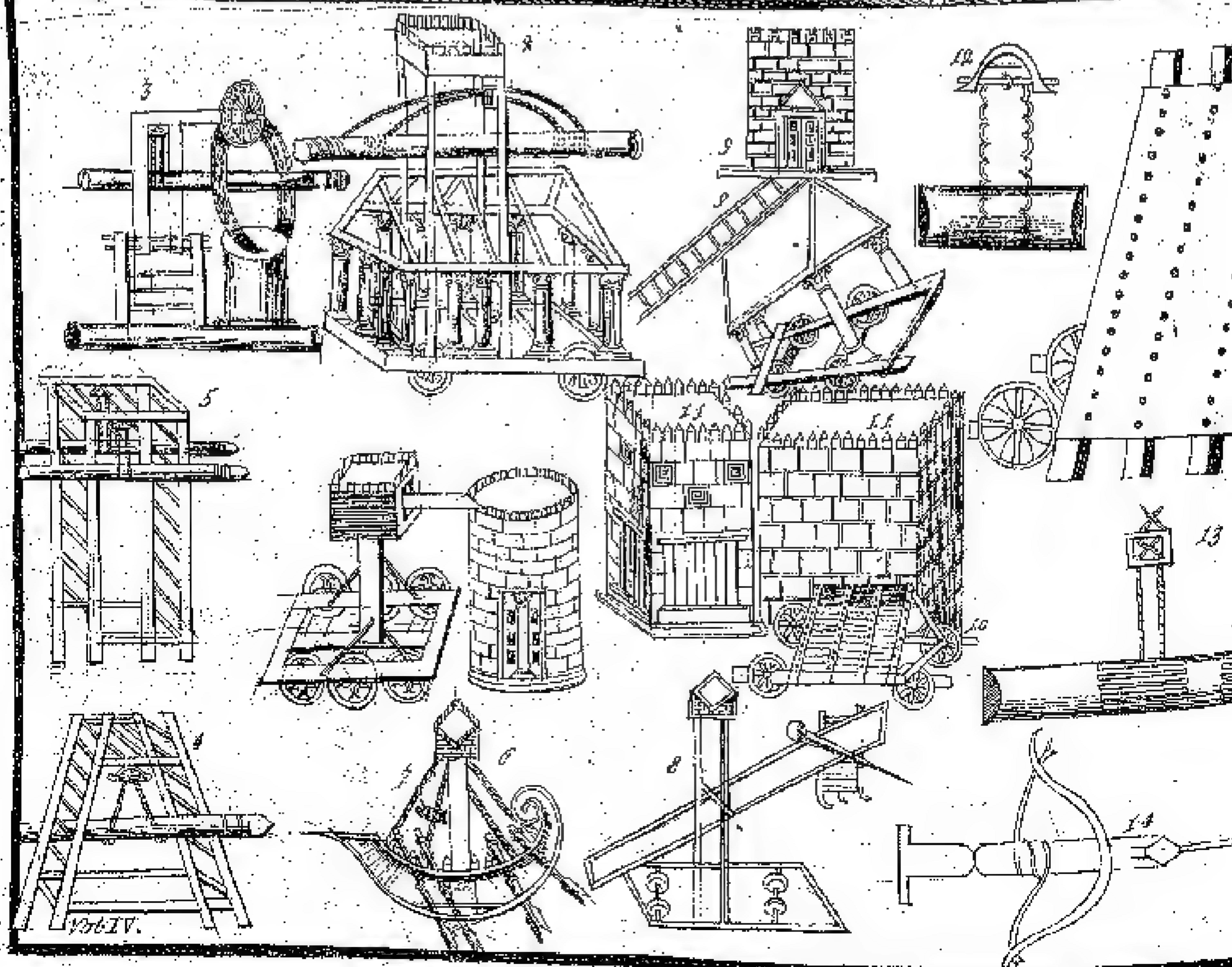
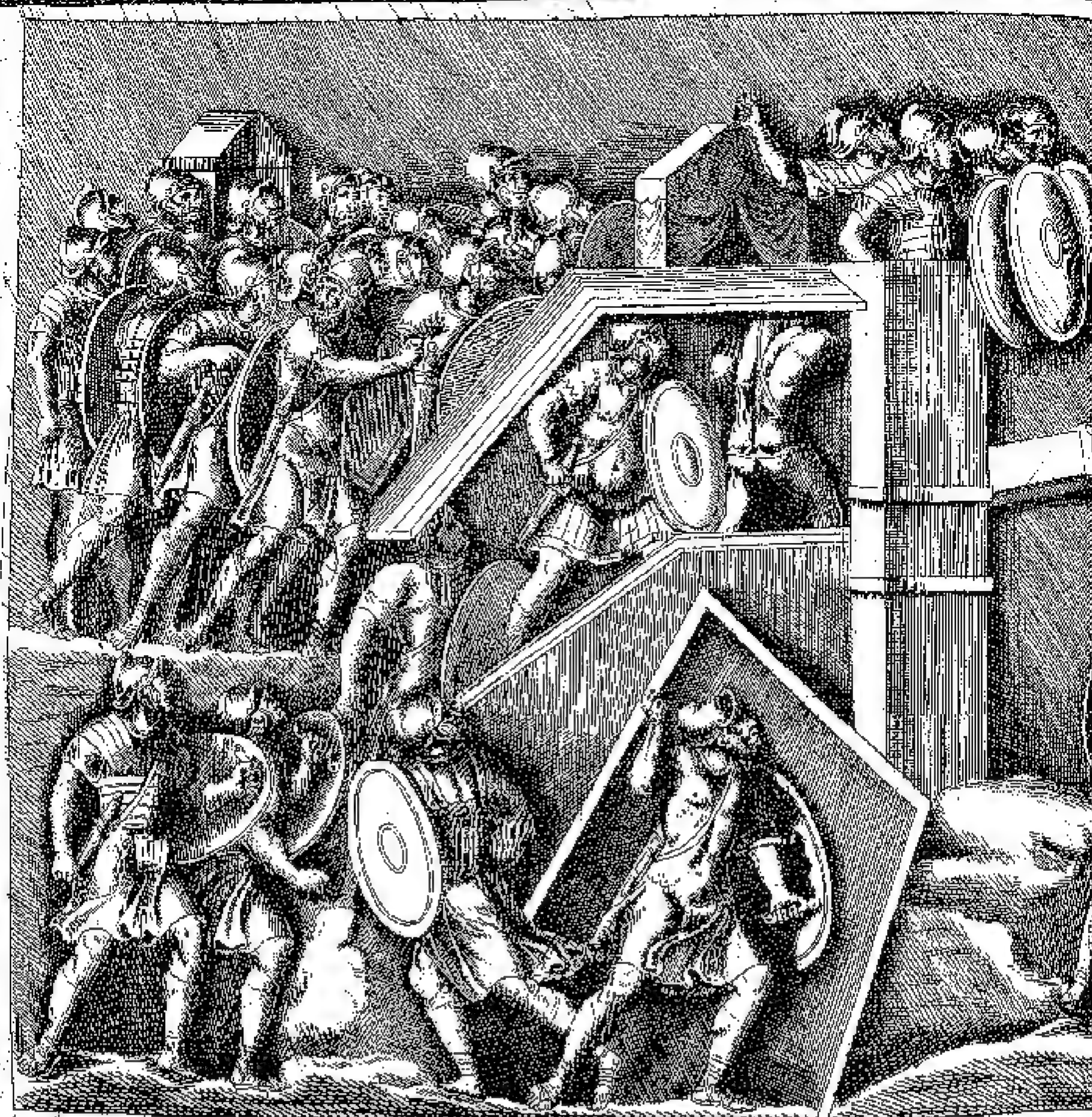
B O O K V.

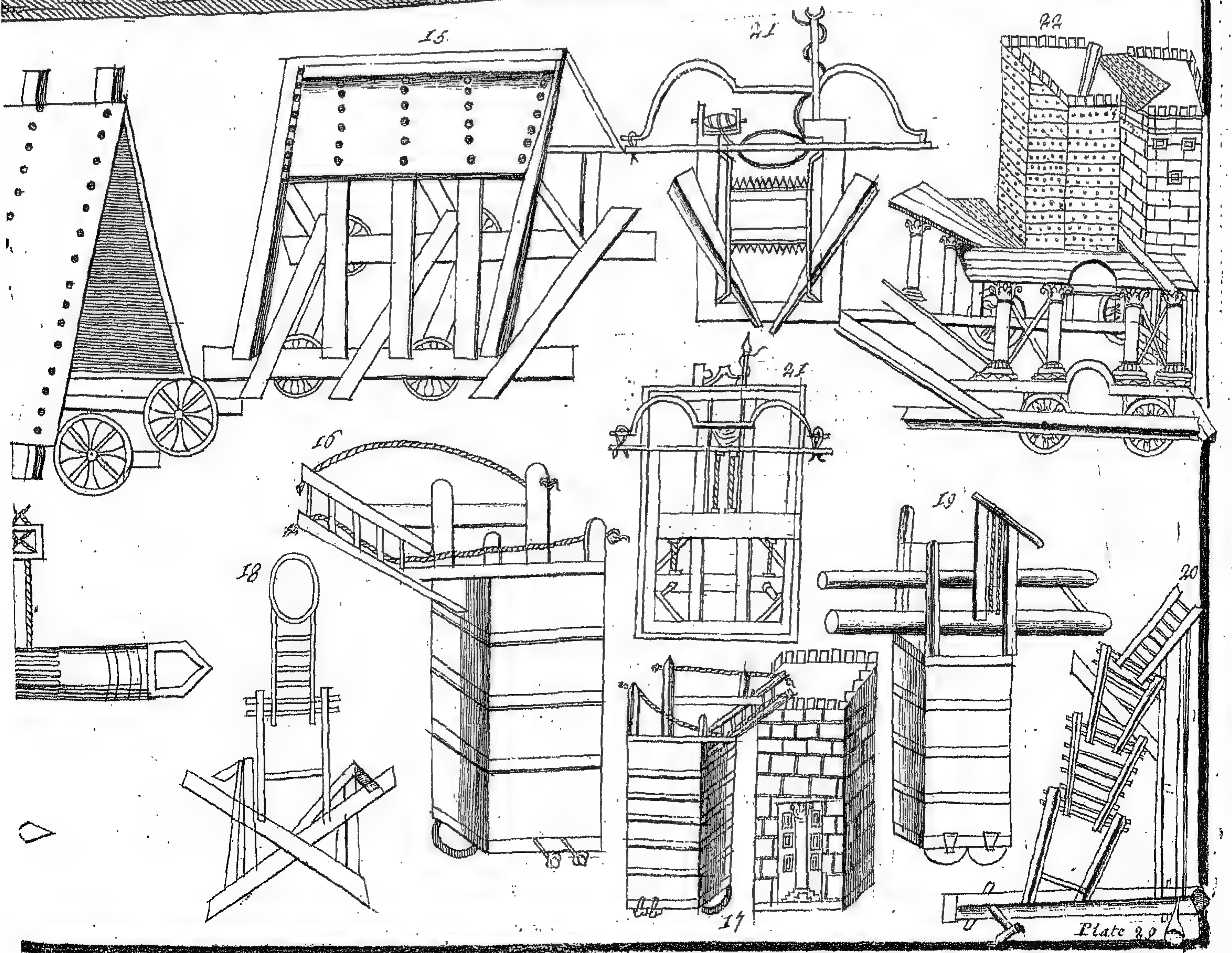
Of the Manner of Encamping, Besieging, and the Machines of War.

C H A P. I.

*I. The Greeks manner of encamping. II. Cleomenes’s manner of encamping
very much admired.*

I. THE Origin of Camps is of very great Antiquity, for we read of them
 in *Homer* fortified with Gates and Ditches, tho’ not so particularly de-
 scrib’d as to be able from thence to convey to the Reader a clear Idea thereof.
 Among the *Greeks*, the *Lacedemonians* were reckon’d the most dextrous at Encamp-
 ment: These made their Camps of a round Figure, looking upon that to be the
 most





most perfect and most defensible Form of any other. Of this Figure also was the Emperor *Julian's* in his *Persian Expedition*, as *Ammianus Marcellinus* tells us, who adds that it was most defensible. We are not, however, to imagine that the *Lacedemonians* thought this Form so essential to a Camp, as never to be dispens'd with when the circumstance of Place requir'd it. The way of Encamping us'd by *Cleomenes* King of *Sparta*, is what is applauded, and by *Polybius* thus describ'd.

II. *Cleomenes* expecting to be attack'd by the Enemy, fortified all the Avenues with Ditches and Pallisades, and put a number of Troops therein to guard them; and marched himself with his Army, which consisted of twenty thousand Men, to *Selasia*, where he encamp'd, supposing that the Enemy would attempt to pass that way, which accordingly fell out. There are two Hills, which form a kind of Streight, one of which is call'd *Eva*, and the other *Olympus*, between which runs the River *Oenus*, not far from whence is the Road to *Sparta*. Before each of these Hills *Cleomenes* made a Ditch, and fortified it, placing his auxiliary Forces upon *Eva*, the Command of which he gave to his Brother *Euclidas*, and encamping himself with the *Lacedemonians* and Mercenaries upon *Olympus*: The Cavalry he rang'd upon a Plain on each side of the River. *Antigonus* arriving afterwards, and considering the Nature of the Enemy's Situation, saw that *Cleomenes* had so dispos'd the several Parts of his Army, that each of them had a convenient Station, and that the whole Camp might fitly be compar'd to the Position of a Set of skilful Gladiators, when they put themselves in a Posture of fighting. In short, nothing was wanting in the Camp that was either fit for the offensive or defensive Part: For it was difficult of Access, and the Troops that guarded it were in so excellent a Disposition to repulse an Enemy, that *Antigonus* did not care at that time to attack them.

Greek Writers furnish us almost with as many different Encampments, as historical Relations, and the *Latins* likewise; it seldom happening that the Circumstances of these are the same. Thus a General, when he is about to encamp, has always new Occasion to exercise his Genius, and it is the part of a skilful Officer to contrive such new Encampments, as are suitable to Time and Place, and other Circumstances.

C H A P. II.

I. *The Encampments of the Romans.* II. *When they begun to encamp in Winter time under Skins.* III. *The Winter and Summer Camps, called by them Stativa Hiberna and Stativa Æstiva.* IV. *Imperfect Images of Camps.* V. *The Tents.* VI. *Other Tents.*

I. **T**HE Camps of the *Romans* were generally of an exact square Form, or else oblong; tho' this, without doubt, was often accommodated to the Situation of the Place. Nay, we find it so in fact upon *Trajan's Column*, where they are exhibited both of a round and oval Figure. *Frontinus* says that *Pyrrhus* King of *Epirus* taught the *Romans* first to encamp; for upon their having defeated him and forced his Camp, they consider'd the Form of it, and from thenceforward imitated it. But this only shews how little we ought to depend on some Writers, altho' ancient; seeing what that Author says, is so far from being true,

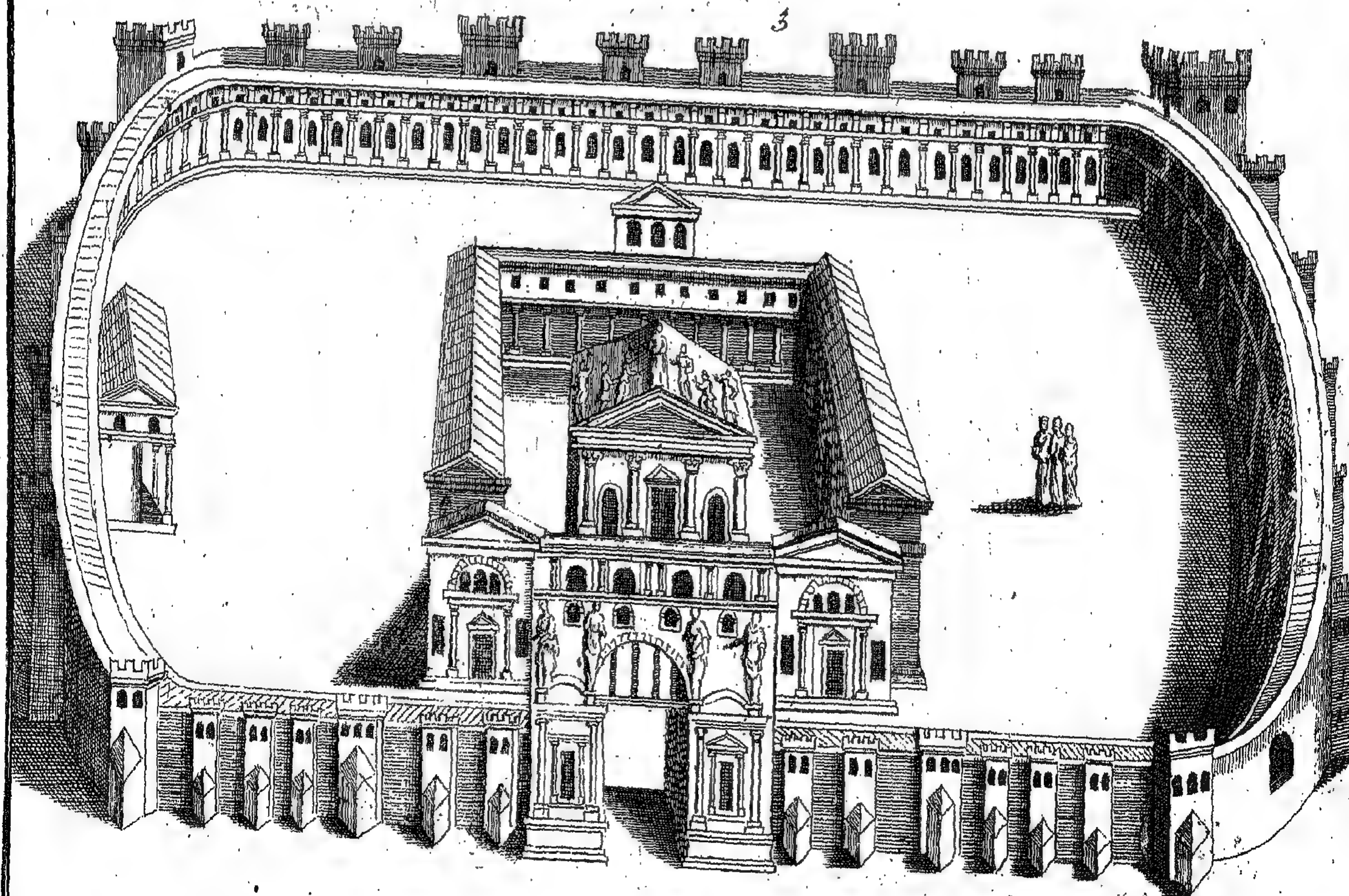
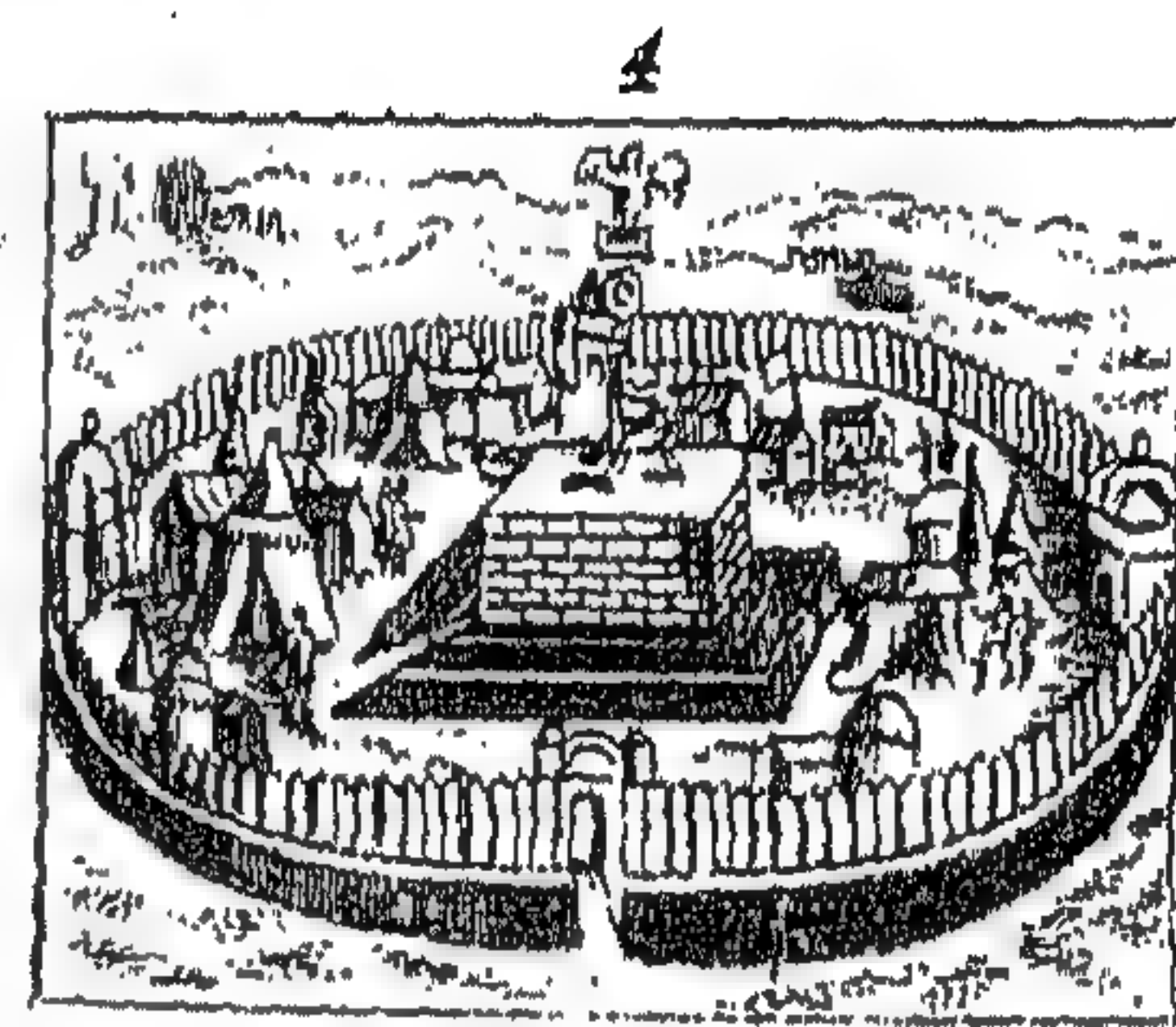
that when *Pyrrhus* first saw the *Roman* Camp, he was astonish'd at the Form and Disposition of it, and said thus to *Megaces*: *Hæc barbarorum castra non barbara videntur*. This Camp of the *Barbarians* has no barbarian Face. In short, the Art of Encamping was known at *Rome* in the time of their Kings: For they then fortified their Camps with Towers and Pallisades. Indeed in the Infancy of *Rome* Camps were not very common, nor can it be suppos'd they should, when the Regal Dominion was so small, hardly extending it self beyond the Territory of the City.

II. 'Twas in the time of the Republick, and about the Year 348, (*a. U. C.*) that they began the Siege of *Vei*, encamping their Army in the Winter; or, to make use of a Term common among *Latin* Authors, passing the Winter *sub pellibus*, under Skins. Thus we find in the History of the Battle of *Scipio* the *Asiatick* with *Antiochus*, related above, where it's said that the Consul, in order to engage the *Romans* to force *Antiochus's* Camp, who had refus'd to give them Battle; told them that if they did not come to a general Action that Campaign, they should be oblig'd either to spend the Winter in their Tents, *sub pellibus*, or else to go into Winter Quarters, and put off the War to another Campaign.

III. When the War was carried on at any considerable Distance, their Camps were then often made of Free-stone; as appears from *Trajan's* Column, the Form of some of which we have here given. These Camps thus built were often the Origin of Cities, but especially the Camps call'd *Stativa*, which were a sort of standing Camps, where Armies lay for some time, or where they pass'd the Winter, and which for that reason were call'd *stativa hiberna*. Of this sort there were many upon the *Rhine*, to hinder the Passage of the *Germans* into *Gaul*. But besides these *stativa hiberna*, there were also *stativa æstiva*, in which they pass'd the Summer under Tents. The Reader is here presented with the Form of some *Roman* Camps, as we meet with 'em in *Trajan's* Column, that is, very close and contracted, yet as well as they knew how to represent it, when they were Strangers to Perspective, at least in Bas-Relief.

Plate 26. IV. The first Camp we have here exhibited is round, but is so very small and
5 close upon the Column, that it contains only two Tents, and those so little, that if a Soldier should lie down in the largest, half of his Body would lie uncover'd without the Tent; whence we may take notice, that we ought here to have no regard to Proportion in any of the Figures, except those of Men and Horses, it being in nothing else observ'd upon the Column. The two Soldiers that guard the Avenue of the Camp, have the right Hand and Finger erect; for what reason I know not: Some, however, will have it to be a Mark of Fidelity; others think that it is some Signal they are making; and others again perhaps will say, that they hold their Hands in that Posture to hinder themselves from sleeping: But these are only Conjectures, and we must therefore wait until something offers that will afford us more Light. Near one of the Soldiers there is, in my Opinion, the Lion's Skin worn by the *Signiferi* upon their Foreheads in Columns and other Monuments, of which number this Soldier seems to have been.

V. Within these Camps they pitch'd their Tents, the Form of which we see upon the Columns, some whereof were made of Gold and Silk, as those, for Example, of *Antiochus* King of *Syria*, who made War upon the *Romans*, and those of *Herod* King of *Palmyra*, the Son of *Odenatus*, and one of the thirty Tyrants, as *Trebellius Pollio* says in his Life. Their Tents were often of a four-square Form,
6 such as are those in this Camp. Those also represented below, are of the same Form, and taken from the same Column: They were not indeed accurately represented in the last Edition of *Trajan's* Column; but *Fabretti* has since corrected them from the Original it self, as they are here exhibited. There were also round
Tents,



Tents, which terminated at the top in a Cone; of which Form we have seen some above in one of *Trajan's* Battles.

VI. The Form of the preceding Camps was altogether round, but this here is only so on one side'. Some *Dacian* Prisoners appear here guarded by *Roman* Soldiers. The two Soldiers that guard the Avenue have the right Hand and Fore-finger in the same Posture as the two former. The following Camp² is of an irregular Figure: It has two Tents in it, and three Soldiers keeping Guard, one of whom only holds his Hand and Fore-finger erect, like the preceding.

PLATE
XXVII.
1

2

C H A P. III.

I. The *Prætorian Camp* at Rome. II. Another small Camp. III. The *Castra Gentiana*, and other Camps in Rome. IV. The Castles and Fortresses which the Romans built for the Security of their Provinces.

I. **T**HE *Prætorian Camp*³ was design'd from the Ruins which remain'd at Rome, about the middle of the 16th Century by *Pirrho Ligorio*, as it's thought. 'Twas no difficult matter to take a Plan of it from the Ruins, neither perhaps would it be so at this Day from the Footsteps that yet remain. This Camp was situated at the *Porta Nomentana*, known now by the Name of *S. Agnes*. It was built by *Tiberius*, with design to keep the *Prætorian* Soldiers together in one place, and to hinder their Dispersion in Quarters throughout the City. It was fortified with Towers on all sides like a Castle or Cittadel, and its exterior Face made part of the Walls of the City. We have here given a Representation of it, as it was engrav'd at Rome after *Ligorio's* Plan; which, by the way, is a very just one, except that he may perhaps have added some few Ornaments: Among these the Statues upon the Gates and Pediment are probably his own Invention.

II. The small Camp⁴ above was first publish'd by *Simeoni*, and afterwards by *Stewechius*, in his Editions of *Vegetius*. The Ruins of this Camp were found at *Modena*: But the Enclosure of Pallisades, the Tents in the Camp, and some other Ornaments there observable, are in all Probability the Figments of his own Brain.

III. There was at Rome a Camp call'd *Castra Gentiana*, in the seventh Region of that City, known by the Name of *Via lata*: which Camp is said to have borrow'd its Name from *Lollius Gentianus*, who commanded the Garrison therein: 'Tis not certain, however, whether it was this *Lollius*, or some other Person firnam'd *Gentianus* that gave Name to it. There is now no Footstep remaining of this Camp. 'Tis otherwise tho' with the *Castra peregrina*, or Camp of Foreigners, the Ruins of which are yet to be seen in the Garden of the Church of *S. John* and *S. Paul*. These Ruins are large Walls that sustain a Terras, which, tho' by some thought to have been the *Castra peregrina*, are yet by others suppos'd to have been what they call'd the *Curia Hostilia*, which, as well as the other, was situated close to the place where this Church now stands. There was also in Rome near *Livia's* Portico a Camp call'd *Castra Misenum*, which was the Camp of the Marines that serv'd in the *Mare inferum* or *Tyrrhenian* Sea, whose Station was at *Misenum*, as the *Castra Ravennatum* was the Camp of the *Hadriatick* Marines, whose Station was at *Ravenna*. But of all these Rome has now no Footstep left, no more than of some others, taken notice of by *Victor*, *Rufus* and other Writers.

IV. Be-

IV. Besides these Camps built by the *Romans*, both in the City and in several Provinces, they had also Fortresses built in such Places as they thought necessary, either for keeping the Inhabitants in their Duty, or for the Defence of the Country from the Incursions of their Neighbours. Such was that Fortress built by *Lucius Calphurnius*, Prætor of *Cœlesyria*, to hinder the Inroads of the *Arabians*, who had the Name of *Scenitæ*, ἀπὸ τῶν σκηνῶν, from their living in Tents. Whether the Inscription from whence we learn this has been yet publish'd or not, I know not. I have therefore given it here as I found it among the Papers of M. *des Monceaux*, Uncle to the Count *de Bonneval*, General in the Emperor's Army.

IMPP. CAESS.

P. SEPTIMIO ET P. PERTINACI

SEMPER AUGUSTIS

L. CALPHURNIUS PR. CAELOSYRIAE. P.

HOC PRAESIDIUM EXTRUXIT

IN SECURITATEM PUBLICAM

ET

ARABUM SCENICORUM (sic) TERROREM.

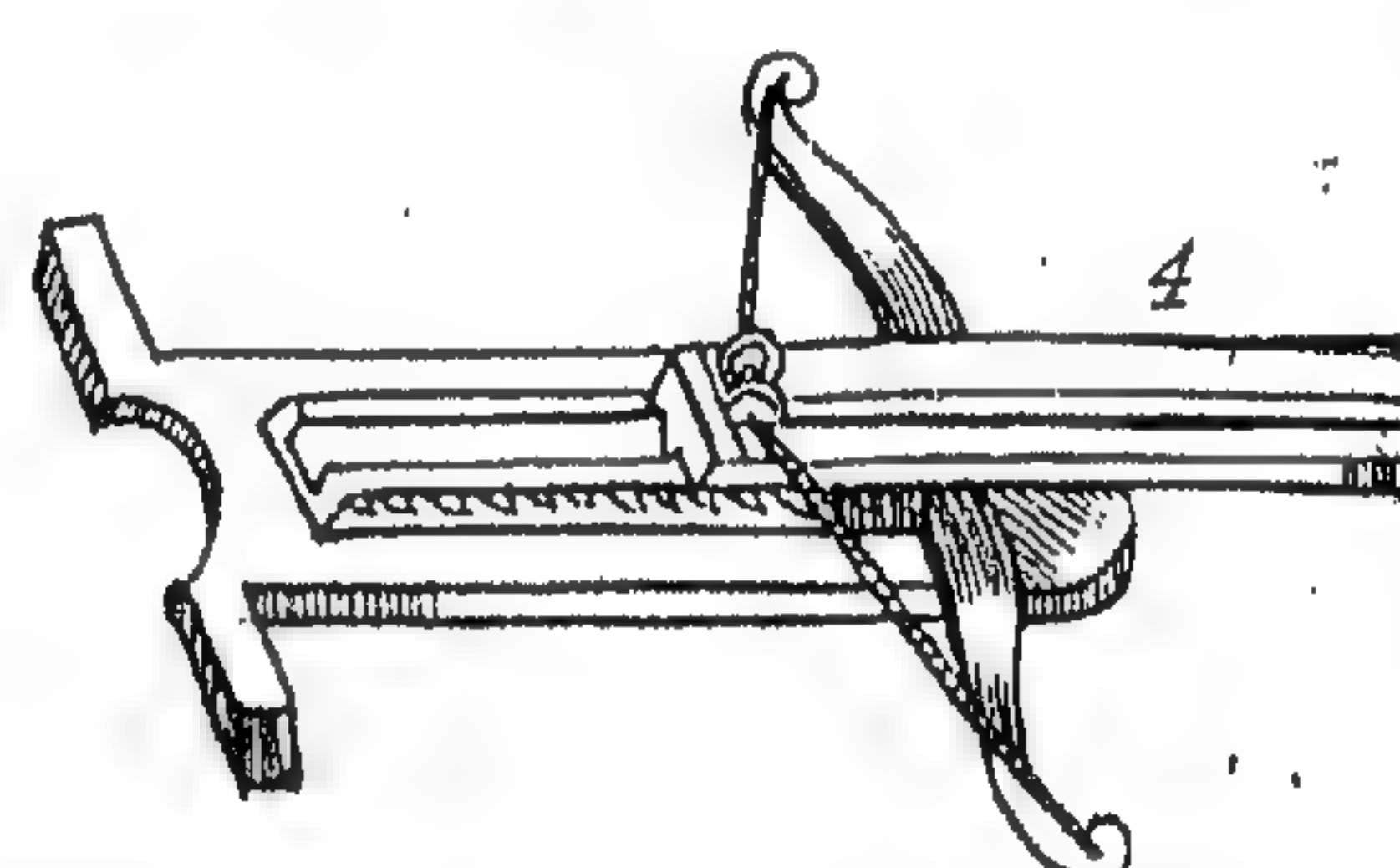
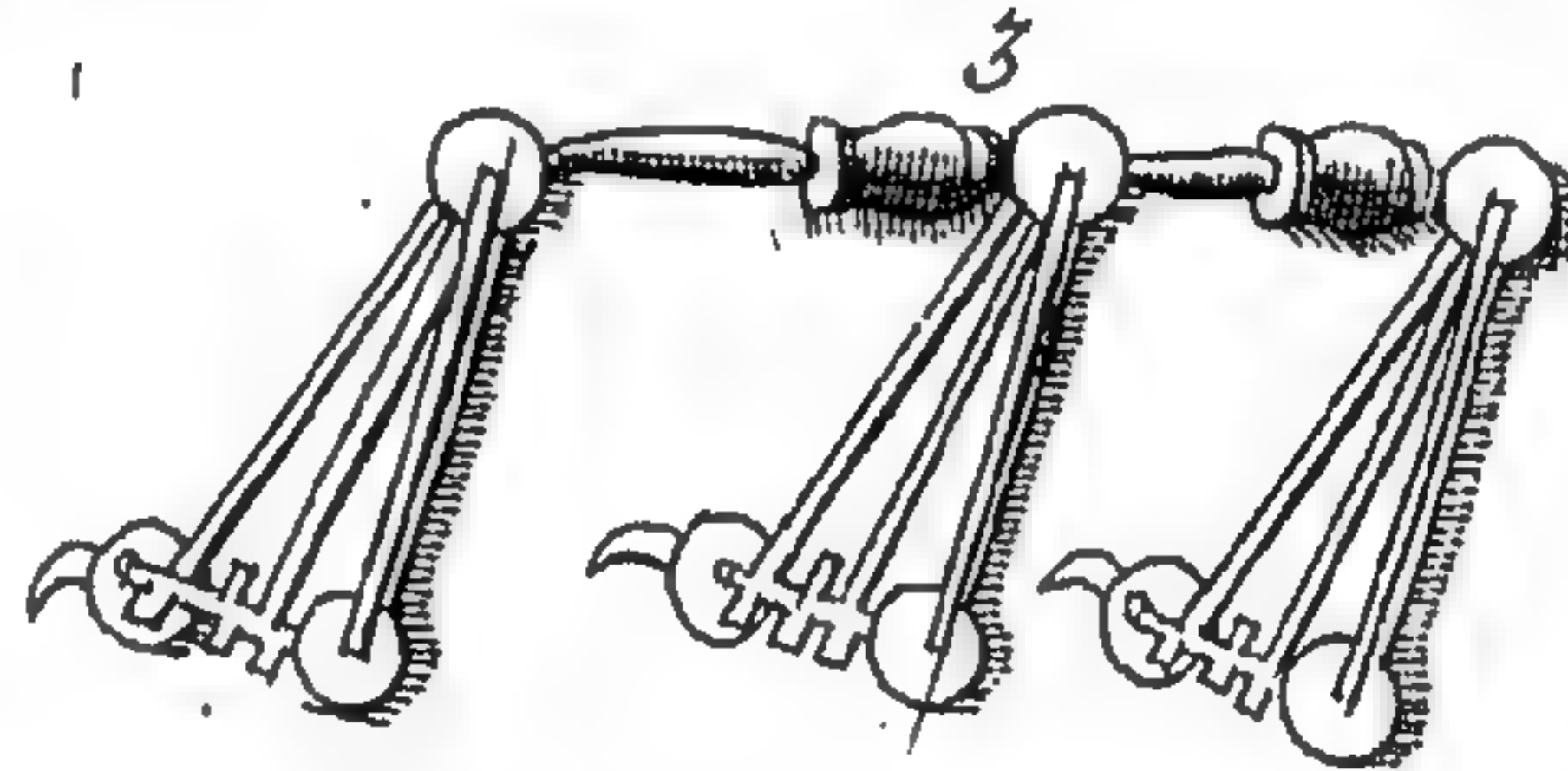
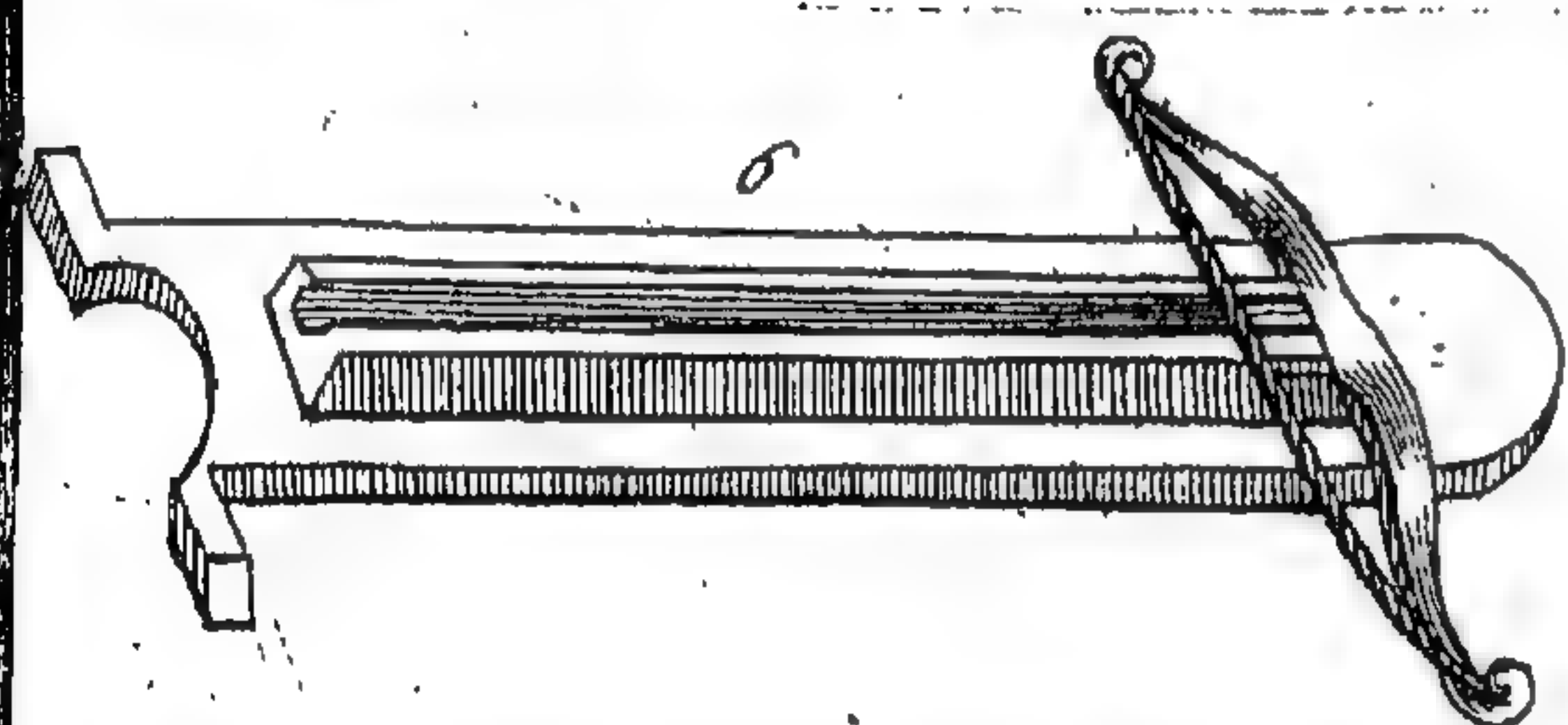
The Sense of which in *English* is this: 'Under the Emperors *P. Septimius* and *P. Pertinax*, *L. Calphurnius* always *August*, Prætor of *Cœlesyria*, built this Fortress 'for the publick Security, and to keep the *Scenite Arabians* in awe.' There are some Difficulties in the Beginning of this Inscription: But what regards the Building of the Fortress, and the *Scenite Arabians*, is without doubt as it should be.

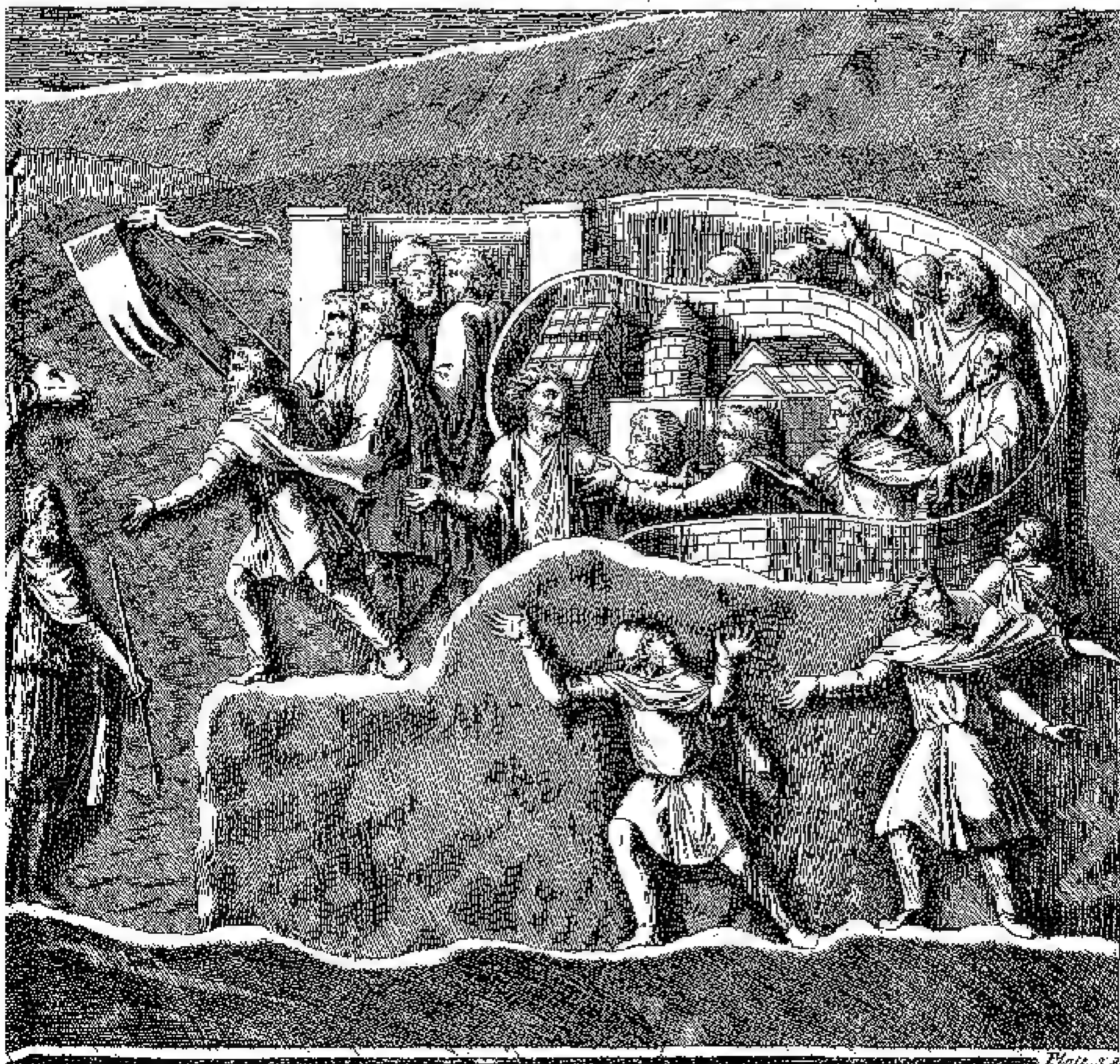
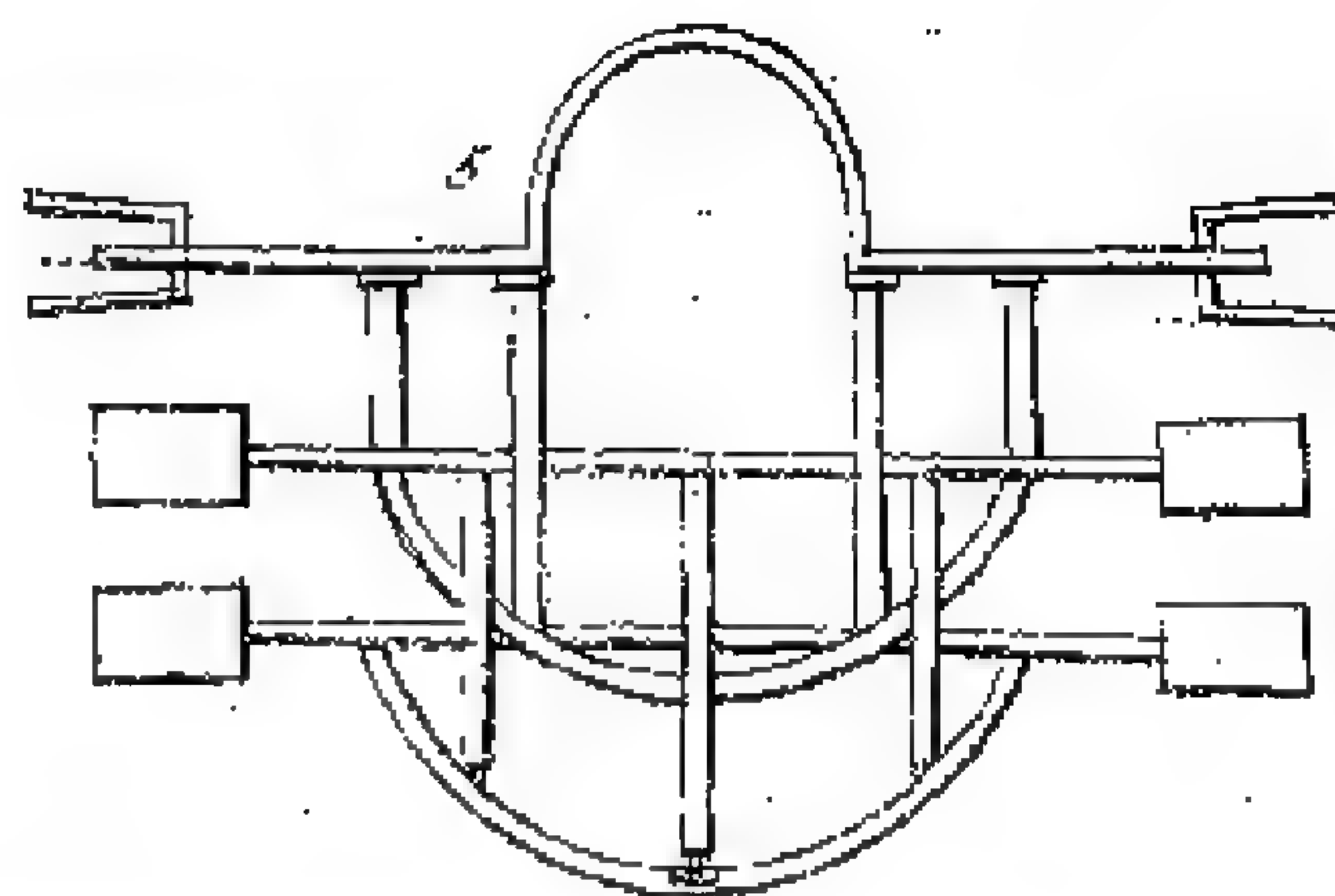
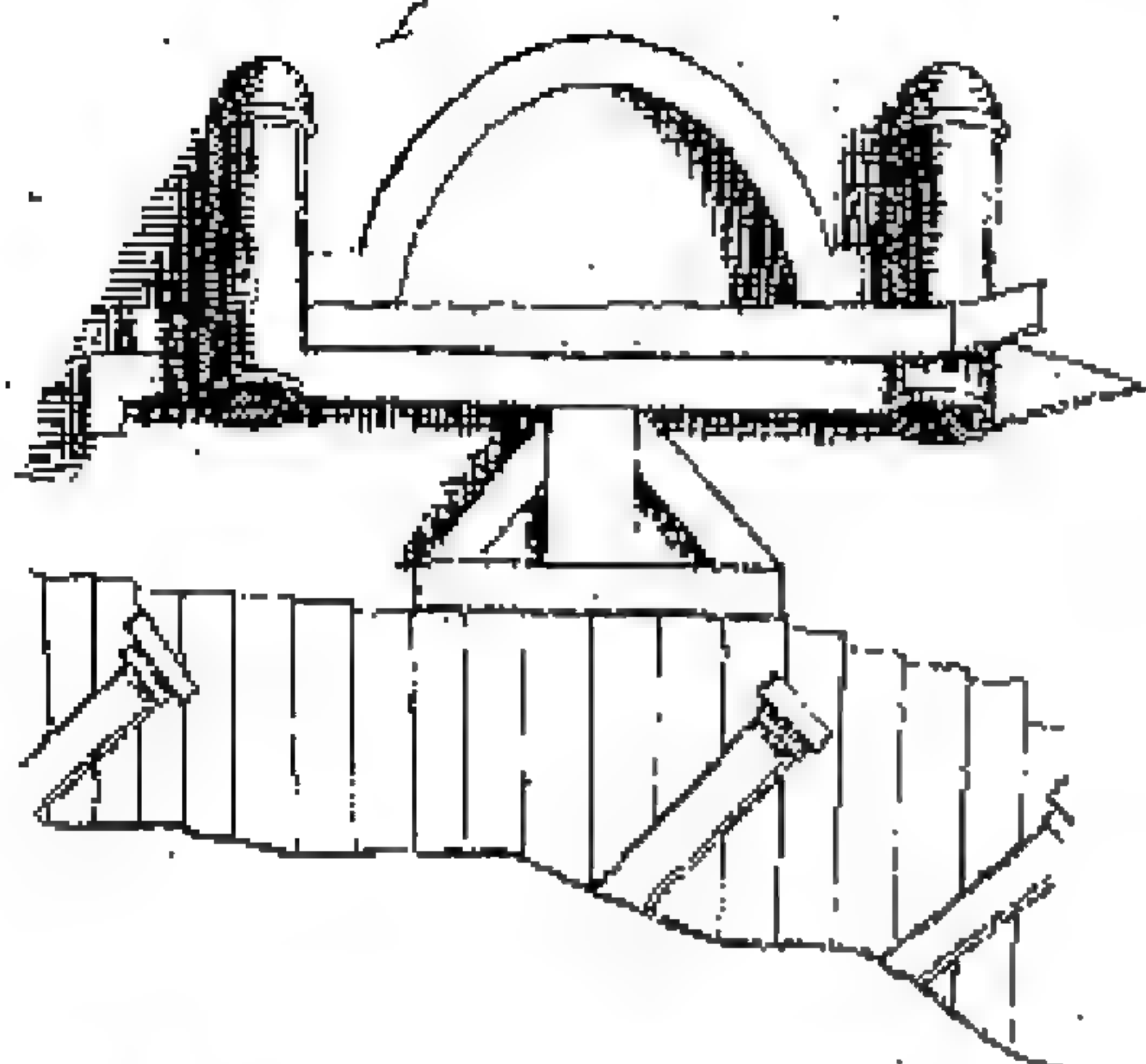
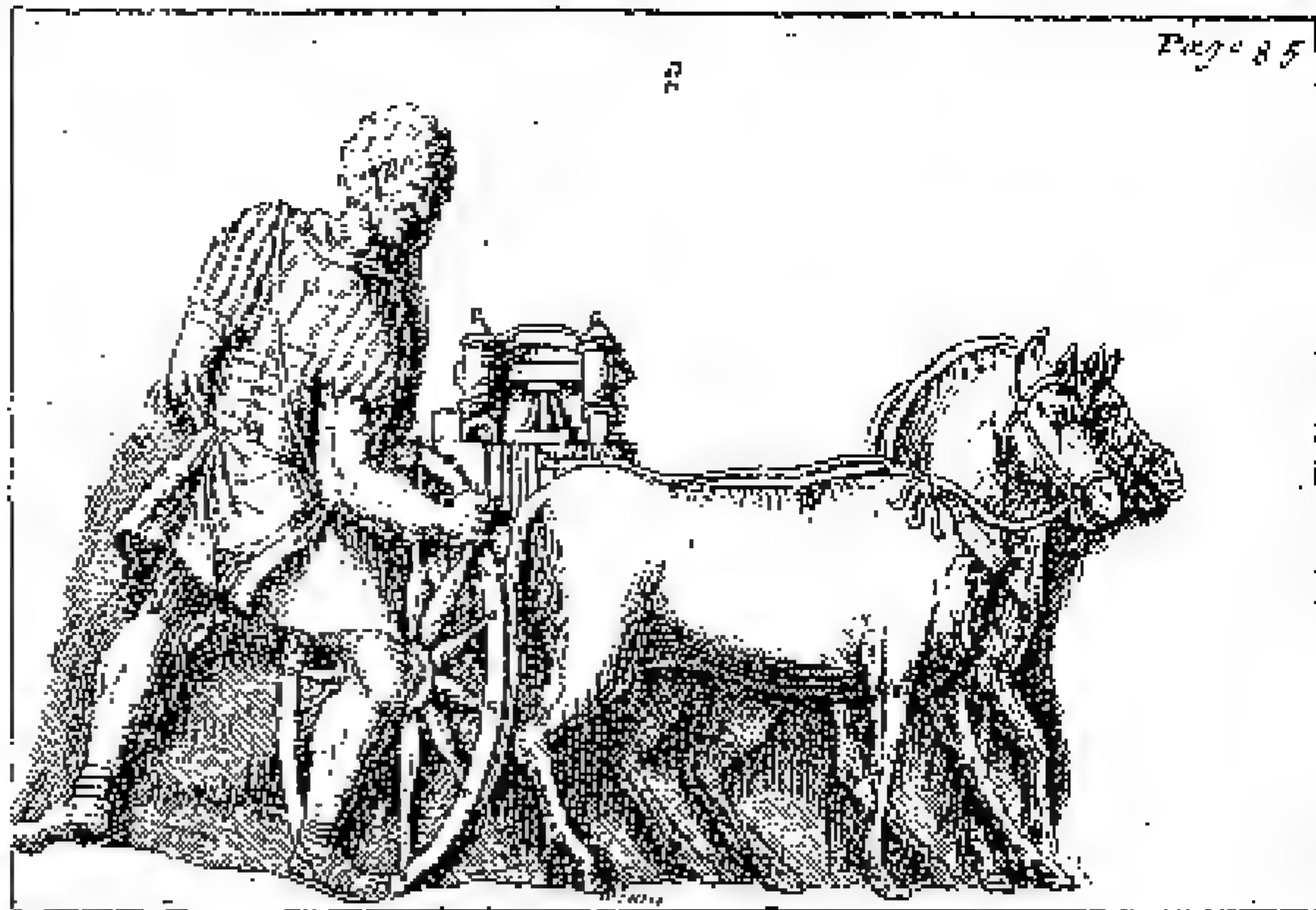
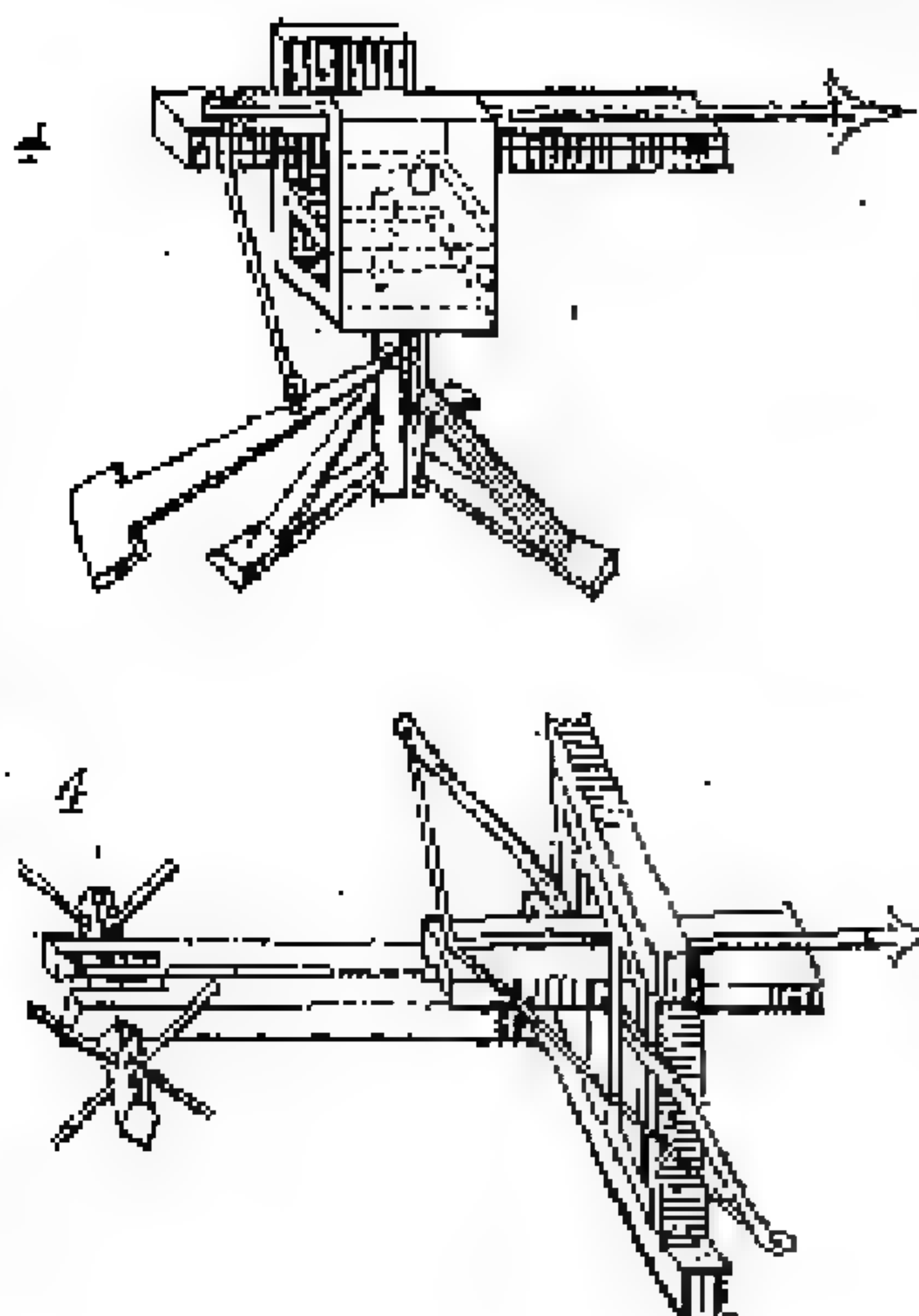
CHAP. IV.

I. *The Origin of the Engines of War.* II. *The surprizing Force of the Catapultæ.* III. *Engines very difficult to understand.* IV. *The Catapulta taken sometimes for the Ballista; Images of them both.* V. *Another Engine.* VI. *The Ballista, and Chiroballista.*

I. **H**AVING treated of the manner of Encamping among the *Greeks* and *Romans*, it now remains that we take notice of the Machines and Engines they made use of in War, especially in their Sieges of Towns and Cities. *Diodorus Siculus* says it was *Pericles* who first invented the Use of battering Rams and Tortoises, and that *Artemon the Clazomenian* was the Artificer of them; that *Pericles* attack'd the City of *Samos* with them, beat down the Walls, and made himself Master of the Place.

II. The first Engine of this kind we shall take notice of, was the *Catapultæ*, a Machine contriv'd for the throwing of Arrows, Darts and Stones. *Vitruvius* gives us the Description of one of these, after which some have endeavour'd to give the Form of it, and to discover its secret Spring or Movement: But such, after all, is the Obscurity of his Description, that when a Man has labour'd never so hard to explain it, he is still uncertain whether he has hit upon it or not. This, however, is certain, that some of these *Catapultæ* were of such a Force, that, according to ancient Writers, they would throw Stones of a hundred Pound weight; from whence





whence they had the Name of *Catapultæ Centenariæ*. *Josephus*, in his *Jewish Wars*, Book 3. Chap. 16 and 17. takes notice of the surprising Effects of Engines of this kind. 'By the Force of Arrows, says he, and *Catapultæ*, great Numbers of People perish'd; and by the Stones thrown out of their Engines the Battlements were beat down, and the Angles of the Towers knockt off: Nay, with such prodigious Vehemence were the Stones sent from them, that a single one would beat down a whole File of Men from one end to the other, were the *Phalanx* never so deep. That Night convinc'd us of the mighty Strength of these Engines; a certain Man standing by *Josephus's* side had his Head struck off with a Stone thrown from one of them, and carried away the Distance of three hundred sixty five Paces: On the Morrow also a Woman with Child receiv'd a Strok from another, which carried the Child sixty two Paces off.

III. *Athenæus*, in his Book of Engines, tells us that *Agessistratus* made one of these *Catapultæ* of three Palms long, which is something more than two Foot, that would throw Arrows the Distance of three *stadia* and a half, which is near half a Mile; and another of four Palms, that would carry four *stadia*, which is a full half Mile.

But these Machines, the Form of which Greek Authors have transmitted to us, are very difficult to be understood; the Explication they have given of them, together with the Figures, affording us but little Help: For besides the Crabbedness of the Greek Words which refer to the Figures, the Letters they were mark'd with, to shew what part of the Machine the Text had Reference to, are also for the most part wanting. We shall therefore leave the Discovery of the Springs or Movements of these Machines to the Makers of such things, which nevertheless will cost them some Pains to find out.

IV. There are some who confound the *Ballista* with the *Catapulta*; which two things, it must be own'd, are not easily distinguish'd from one another by what Writers have said of them; what they have left amounting to no more than this, that both the one and the other were Engines contriv'd for the throwing of Arrows, Stones and other things of Weight. Of this kind is that we have here PLATE first represented¹, as *Fabretti* took it from *Trajan's Column*. There were also *Ballistæ* which they carried in Waggon as a sort of Field-pieces, one of which we have here given², which seems to be the same with the other as to the Form of it. The *Dacians* made use of these sorts of Engines, as well as the *Romans*. XXVIII.

V. Other kinds of Machines occur also upon *Trajan's Column*, some of which we neither know the Name nor the Use of. Such is that with several small Wheels fix'd to certain Levers³, seen not only upon *Trajan's Column*, but also upon some antique Bass-Reliefs. These indeed *Bellori* took for no more than little Carriages to convey the Machines upon; but *Fabretti*, who in his *Trajan's Column*, p. 220, has accurately describ'd the Form of this Machine, is of Opinion that the *Dacians* furnish'd it thus with Wheels, the better to get it up Hill when they laid Siege to any of the *Roman Cities* situated upon Eminences: He also adds, that they fix'd Scythes to the Axeltrees of them, to cut off the Limbs of those they met in their way.

VI. The Figures of the *Ballistæ* which follow⁴, are taken from *Heron's* Book, the famous Engineer, who has given us all the several Parts of it distinctly, together with Explications of them; but these are so very obscure, that no Editor durst ever venture upon a farther Interpretation.

The next is by *Heron* call'd *χειρὸς ἀλλιστρα*⁵, which is as much as to say a Hand *Ballistra*: It has some relation to that represented before, taken from the *Trajan Column*. The other is more simple⁶, and not unlike the *Ballistræ* us'd in later Ages.

C H A P. V.

- I. *The Invention of the Battering Ram, the Engine commonly used to make a Breach in Walls.* II. *The Daci work them with the bare Strength of their Arms.* III. *The Roman Battering Ram.* IV. *Three Methods of working the Battering Ram.* V. *Other Battering Rams.*

- I. **T**HE Engine most in use for making Breaches in besieg'd Towns, was the battering Ram, employ'd both by *Greeks* and *Romans*. It was by the *Greeks* call'd *Κεῖς*, and by the *Latins*, *Aries*, both which Words signify a Ram, from its resembling a Ram's Head in that Part which battered the Walls. All the Rams we meet with in *Roman* Monuments have this Form; concerning the Origin of which, however, there is some Dispute, many attributing the Invention of it to the *Carthaginians*, who, at the Siege of *Cadiz*, *Vitruvius* says, being desirous to beat down a Fortrefs they had taken, and having no Iron Instruments or other Machines fit for the purpose, took a Beam or great piece of Timber, which they beat with all their Might against it, redoubling their Strokes, until at last they quite demolish'd it.
- 7 II. In this manner also we see the *Daci* in *Trajan's* Column⁷ pushing the Ram by the Strength of their Arms against the Wall of a certain *Roman* Fortrefs, which they had laid Siege to. There they work this Machine openly and without any Cover, so that both the Ram and they who manage and direct it are expos'd to the Darts of the Besieg'd. It must certainly be no easy thing to do any considerable Damage with a Machine work'd in this manner by meer Strength; we see them nevertheless labouring at it without the least Cover; the rest of the *Daci* at the same time shooting Arrows at the Besieg'd, in order to make them quit the Ramparts, and by that means also to secure those that work'd at the Machine from being too much annoy'd by the Enemy. That these Walls were of no great height, appears from hence, that the *Sarmatian* Cavalry, whose Description we have given above, are seen skirmishing with the Besieg'd. The Attempts of the *Daci* appear to have been ineffectual.
- 8 III. The *Romans*, however, were more successful, as we find in the Arch of the Emperor *Severus*, where they make use of the battering Ram in the Siege of some place, but so that they work it under the Cover of wooden Houses⁸. The Breach there made is already so great, that the Besieg'd begin to capitulate with the Emperor, as may be seen in the Image. We see here the military Ensigns of the *Parthians* besieg'd, namely a Dragon upon a Spear, and a Standard not unlike those of this Day.
- IV. There were several ways of using this Ram: The first was that of the *Carthaginians*, who were the Inventors of this Engine, and who work'd it, as has been observ'd, by meer Strength of Arms, and that without Cover too, as we see the *Daci* also did upon the *Trajan* Column. The second way of using this Machine, was by suspending it in the Air with Cords or Chains, and beating it against the Wall after having first recoil'd it; in which manner it was, according to *Josephus*, that the *Romans* us'd it against the Walls of *Jerusalem*: Nor was this way near so difficult as the other, it requiring no great Strength to move a Body suspended in the Air, let the Weight of it be never so great. It does not appear that the first Ram in *Severus's* Arch was thus suspended, the Covering thereof seeming too low to admit of such a Suspension.

V. The

V. The other Ram represented in *Severus's* Arch at another Siege¹, is plac'd ^{PLATE} within a singular kind of Structure; which Structure is rais'd higher than the Walls of ^{XXIX.} the City, and has Soldiers both within it, and above upon the top of it, who by reason of their being situated so much higher than the Besieg'd, fight them with Advantage, and oblige them to a Capitulation, a Breach also being already made with the Ram. In these two Images the Ram does not appear to be mov'd by Libration, but rather by the Help of some Spring. The Image of the following Ram² was found at *Rome*, and publish'd by *Fabretti* in his *Trajan Column*, p. 216. One very remarkable thing in this Plate, is, that the *Roman* Soldiers, which are here in great number, wear a Helmet bending forward from behind, after the manner of the *Tiara* of the *Parthians*, against whom they then made War under the Emperor *Severus*; tho' in the preceding Image, taken from the very same Arch, which also represents another Action of the *Romans* with the *Parthians*, their Helmets are quite round as usual: From whence it's probable that it was at the time of this War they took those Helmets of the Form of the *Parthian Tiara*, tho' for what reason I know not.

C H A P. VI.

I. A Battering Ram suspended, which was moved by a librating Motion. II. Another sort of Battering Ram. III. Means for weakening its Force. IV. Engines used to oppose the Battering Ram.

I. **A** *POLLODORUS* gives us three other Forms of the battering Ram, all different, which we have here exhibited after him: They all agree in this, however, that the Ram is suspended. The first of them³ is carried through the middle of an open Wheel, design'd for the raising of Water to the top of the Engine, in case the Enemy should set it on Fire. The second Ram⁴ is suspended between two Ladders. But in the third Image⁵, which represents a kind of four-square Tower, there is a Ram on each side. Besides these, *Apollodorus* gives us also several other ways of suspending this Machine.

II. In *Athenæus's* Book of Machines there is another way yet of working the Ram, which is not done by Suspension in the Air, but by supporting it with Bars of Iron or other Metal, which form a kind of Arch: But how it can be mov'd with any Force in this Situation, without being suspended, I confess I cannot see.

III. As the battering Ram was of all others the most pernicious Engine to the Besieg'd, so it put them upon inventing many ways to render it useless: Among these they endeavour'd to set fire to the Covering, and also to the Wood Work that sustain'd it, to destroy both that and the Ram together, if possible; to prevent which, we find the last Ram in *Severus's* Arch encompass'd with a Building of Stone. To weaken the Force of the Ram, their way was to hang Sacks of Wool at the Place it was to be plaid against. To this purpose also *Josephus* hung Bags of Straw on the Walls of *Jotopata*, when it was besieg'd, which, as he himself relates, retarded the taking of the Town a long time.

IV. To this Ram they also oppos'd other Machines, with Design to break it when it was play'd upon the Walls with Violence: Nay the whole Business of the Besieg'd was to make it either wholly useless, or at least as little injurious as possible. To this purpose there is a remarkable Story in *Josephus*, where 'tis said, that,

that, at the Siege of *Jotopata*, a certain Jew call'd *Eleazar* threw a Stone of a prodigious Size from the Walls upon the Head of the Ram, which with the Violence of the Fall broke it quite off; that, when this was done, he leap'd down himself, and carried off the Head from among the midst of the Enemy to the top of the Wall, in which Action he receiv'd five Wounds by the Shot of the Enemies Arrows, yet for all that kept his Station upon the Walls until he fainted with the great Effusion of Blood, and fell from thence, together with the Head of the Ram, among the Enemy.

Another way of breaking the Force of the Ram, was by thrusting out of the Wall a certain Piece of Iron with Teeth, call'd a Wolf, or else a sort of moveable Beams to be rais'd or let down, so as to receive the Stroke of the Machine, and deaden its Force. *Polyenus* tells us, that *Athenocles* being besieg'd, caus'd Beams of Lead to be made, and to be fix'd in those Parts of the Wall where the Ram was to play, by which means, continues he, not only the Strokes were weaken'd, but the Machines broken.

C H A P. VII.

I. The Helepolis, another Engine to take Places. II. Another Engine. III. The Crane. IV. The Testudo. V. Another Engine for sapping. VI. Moving Towers; other Engines.

I. **A**NOTHER Machine made use of in Sieges, was what *Athenæus* calls *Helepolis*, which Word in *Greek* signifies a Taker of Cities. This Engine mov'd upon six Wheels, by the help of which it was easily convey'd from one place to another: Its Base was large, and compos'd of Pieces of Timber, from the middle of which there issued a large Beam upwards, with a kind of low four-square Tower at the top, to contain a certain number of Soldiers: This Tower, however, was higher than the Walls of the Fortress to be attack'd, and had a wide Mouth on that side of it next the Wall, to the end that when the Soldiers had clear'd the Ramparts by the Shot of Darts and Arrows, they might thrust out a kind of Draw-Bridge, the End of which they rested upon the Wall, for the more commodious entering the Place.

6 II. They also made use of another Machine 'not unlike the last, at the Siege of maritime Towns, or Towns situated upon a River, in which case a Vessel made for the Purpose serv'd for a Base to the Machine, as we see in the following Image,
7 and likewise a grappling Ladder'.

8 III. Another military Engine 'was the Crane, (*grus*) the Base of which rested upon Wheels: From this Base there rose up two Beams, at the top of which was a kind of wooden Redoubt for the Reception of a number of Soldiers placed there to pour their Darts and Arrows upon the Ramparts, and clear them of the Enemy. At these two Beams there was fix'd a kind of large wooden Bridge, which hung down towards the Ground, but might be rais'd by degrees as high as the top of the Wall; by means of which Bridge the Soldiers that were to make the Assault were help'd up, while those within the Redoubt clear'd the Ramparts with their Darts and Arrows. Toward the End of this Bridge there's a grappling Ladder to lay hold of the Parapet. The huge Leaver or pointed Stake which is seen there, serv'd probably for the fixing either the Bridge or the Ladder.

IV. I

IV. I do not well understand the Machine ⁹ that follows: *Apollodorus*, who was the Publisher of it, indeed says that it was design'd for a kind of Cover for the Besiegers to skreen them from the Darts of the Besieged; but his Discourse in that place seems to me to have no relation to this Machine, with a Ladder fix'd to it: By its being carried however upon Wheels, it seems to have been intended to approach the Walls of a Place with, under Cover; and by the *Greeks* call'd *Χελών*, the Tortoise, or *Testudo*.

The following Machine ¹⁰, which moves also upon Wheels, is likewise a Tortoise, under the Cover of which they us'd to work in the sapping of Walls, and perhaps is the same thing with what *Cæsar* calls *Musculus*: 'Tis made of Wood, and the several Parts of it strongly fasten'd together with Nails: The Form of it on one side is sloping like the Roof of a House, and on the other side it's sustain'd by two Beams plac'd perpendicularly under it. Under the Cover of this the Besiegers advanced to the Walls of the Place, working at them by Sap in defiance of the Enemies Arrows: It was also cover'd with moist Earth, to preserve it from the Fire of the Besieg'd, which they never fail'd to throw on it. Besides this Machine, they had also great store of Piercers, and those too of a prodigious Size, to bore Holes in the Walls with; in which Holes they made Fires of Wood, in order to calcine the Stones. We shall present the Reader below with the Form of one of these Piercers, which without doubt were made of very hard Metal.

V. The four-square Tower ¹¹ plac'd hard by, denotes the Sapping to be already begun, and supposes the Sappers to be within the Wall, and by consequence skreen'd from the Darts of the Besieg'd. *Apollodorus* says, that for fear the Walls should rumble upon the Sappers, they were to prop them up with Supporters; and adds, that supposing the Sap to be made under the Foundations, they were to place thick Planks under the Supporters, to hinder them from sinking into and breaking through the Ground, and also to fill up the void Spaces with Vine-branches, and then to set Fire thereto in order to bring down the Walls.

The same Author adds, that to preserve those under the Machine from being burnt with the hot Sand, the melted Pitch and boiling Oyl pour'd down by the Besieg'd, they ought to cover the Roof of the Machine with raw Hides, fasten'd on with large Nails, not drove quite down to the Head, but left sticking out a little above the Surface, the better to keep the soft Earth together, to which end the Nails were to be placed thick, and to have large Heads. The Earth thus thrown upon all was very proper to save the Machine from the Enemies Fire. Near this Machine are two Figures of the Battering Ram: The first ¹², which is suspended, is indeed but part of the Ram; the second ¹³, however, is entire.

The following Machine ¹⁴ in the Form of a Bow, is the Piercer taken notice of above for boring Holes in the Walls to put Wood in; in which Holes, together with the great one made by Sapping, which is also to be fill'd with Wood and other combustible Stuff, will soon bring down the Wall when Fire is set to. The next Machine ¹⁵ is design'd also for sapping with.

VI. The Ancients made use also of a sort of wooden Towers that mov'd upon Wheels, and which had Draw-bridges at the top, to thrust out or let down upon the Walls of Towns or Fortresses; the Use of which Machine, tho' very ancient, continued down to the lowest Ages, when the Invention of Guns made all other military Engines useless. We have here two of these moving Towers, one of them with the Draw-bridge ¹⁶ ready to be let down upon the Wall, the other ¹⁷ with it already let down upon one of the Towers of the Place, ready to make the Assault. Another Machine hard by ¹⁸, where we see a turning Ladder, is design'd to view the Town from, and discover what's passing therein. The Ladder was contriv'd to be rais'd or let down in an Instant, as there was occasion; and when the

Place was to be view'd, a Man was set at the end of the Ladder, and at once rais'd up above the Walls, so as to command a Prospect of the Town within.

19 Other moving Towers¹⁹ had two Rams as high as the Fortification to beat down the Battlements and Embrasures, and drive away the Enemy from those Places they intended to attack.

20 We have here also a Ladder²⁰ of a singular Structure; of which fort *Apollodorus* is of Opinion they us'd a great number, that a good Body of Men might scale the Walls together.

21 *Biton* gives us the Figure of a *Catapulta*²¹, an Engine to throw Stones with, first invented and made at *Rhodes* by *Charon* the *Magnesian*, and which I here give after him, tho' altogether ignorant of its Spring or Movement: He marks out all the several Parts of it by numeral Letters, which ought also to be found upon the Machine; but it happens that they are not, any more than in another *Catapulta* invented by *Isidorus* of *Abydos*.

22 The same *Biton* has also given the Figure and Explication of an *Helepolis*²², or Taker of Towns, made by *Posidonius* the *Macedonian*, for *Alexander* the Great: The Form of it is extraordinary, and it's represented in the Image as apply'd to a Tower. He distinguishes the several Parts by numeral Letters, which now are not to be seen on the Machine. 'Tis a moveable Tower, which they us'd to advance towards the Tower of a City, letting down a Draw-bridge for the Convenience of making the Assault.

C H A P. VIII.

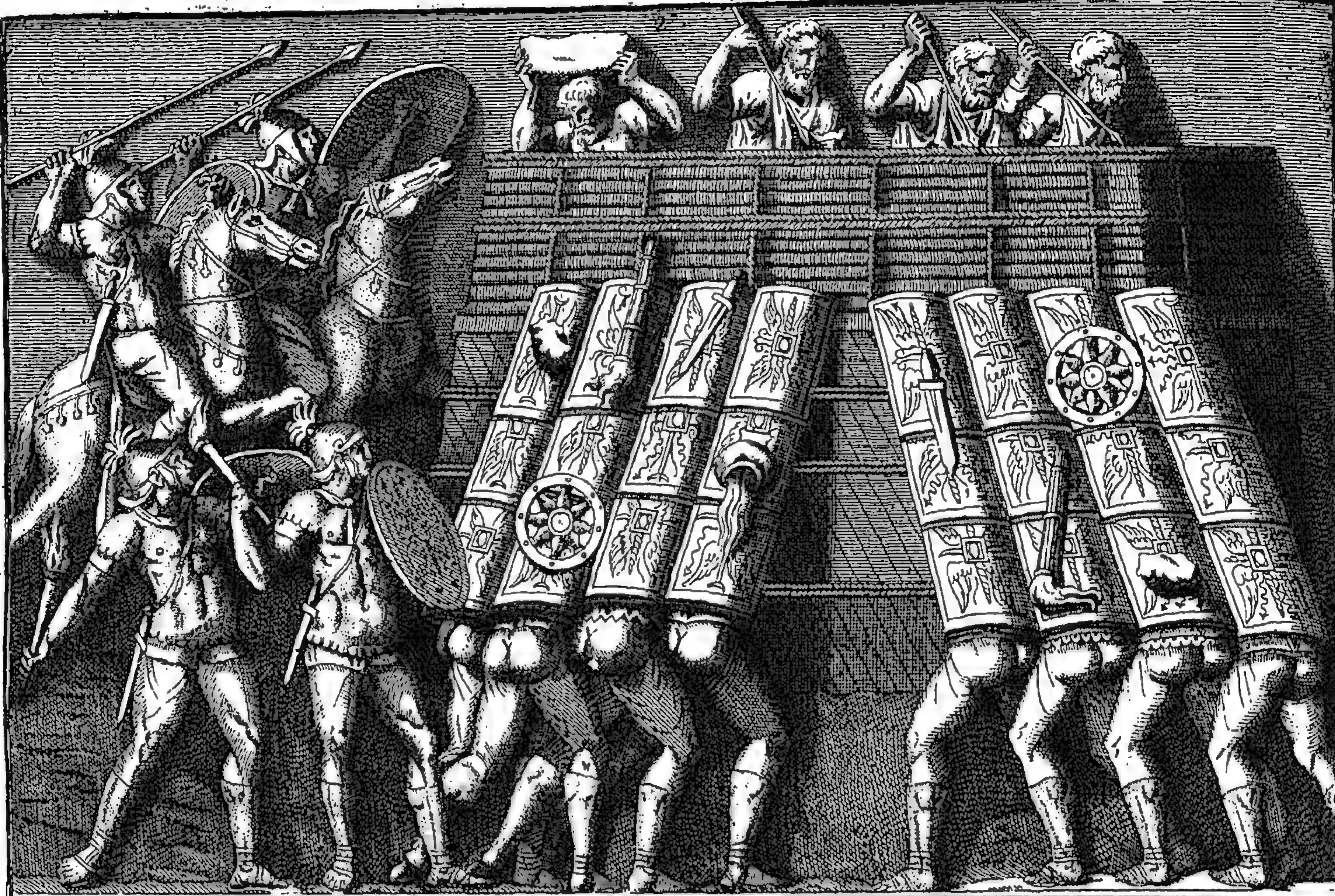
I. The Testudo composed of armed Soldiers to attack Places, used by several Nations, and by the Romans: II. Images of the Testudo. III. Another Figure of the Testudo made in an open Field. IV. The double Testudo.

I. **W**E have already taken notice of the wooden Machine call'd the *Testudo*. We come now to treat of another sort of *Testudo*, compos'd of armed Soldiers, but which may also be taken into the number of military Machines: To make this, the Soldiers were drawn up as close and compact as possible, making a kind of Edifice, not unlike the Roof of a House. This *Testudo*, according to *Cæsar*, was in use both among the *Gauls* and *Belgæ*; whose Troops, he says, when they invested a Place, and had clear'd the Ramparts by the throwing of Stones, form'd themselves into the *Testudo*, and attack'd the Gates. The *Greeks* had also the Art of making this *Testudo*, as well as the other which was the wooden Machine. Nor were the *Romans* Strangers to it, but on the contrary made frequent Use of it, especially in Sieges; which they did in this manner: When the Men were close compacted as above, they put their Shields, which were in the Form of a Pantile, above their Heads, making thereby a kind of Roof so close and firm, that the Besieg'd with all their Attempts could neither break or move it. But forasmuch as the Shields being thus above the Heads of the Men, those who had their Station at the Sides and Extremities must needs be naked in Flank, the Soldiers therefore in those Stations, who were likewise under Cover, to prevent their being thus expos'd, made use of their own Shields to cover both their own and their Neighbour's Flank with.

PLATE

XXX.

II. *Trajan's* Column exhibits to us a *Testudo* of this kind¹; as does also that of *Antoninus*, but far more remarkable²: For the *Germans* throw upon its Roof huge Stones,



Stones, Chariot-Wheels, Pot-granadoes, Torches and Swords; all which rest upon the Superficies without making their way through, or so much as shaking it.

III. *Dion* describing the Retreat of *Mark Anthony*, pursued by the *Parthians*, says that the *Romans* bethought themselves of a Stratagem, which was to draw up in a *Testudo*, to guard themselves by that means from the Darts the *Parthians* continually plied them with. These having never seen any thing of this kind before, and believing the *Romans* to be fatigued, both with the March and with the Wounds they had receiv'd, leap from their Horses, and leaving their Bows, fell upon them Sword in Hand, as if they were sure of a Victory. Upon which the *Romans* gave the Signal, and charg'd the *Parthians* so warmly, that they could not stand the Shock, but gave way and fled, leaving great Numbers dead upon the place. *Dion* after this, explains the manner of making the *Testudo*, which he says was thus. 'The Baggage, and light-arm'd Men, and the whole Cavalry being dispos'd in the Center, the heavy-arm'd Foot, whose Shields are like a Tube cut in two, range themselves at the Extremities, making thereby a kind of Wall, which skreen'd those within. The rest with large Shields are close compact in the Center, and raise their Shields above their Heads to cover themselves and their Neighbours, so that of the whole Army there's nothing seen but the Shields, and all the Men skreen'd from the Darts that were thrown, so close were the Shields dispos'd and rang'd together. Nay so strong and firm is this *Testudo*, that Men might walk over it, and even Horses and Chariots too when the *Testudo* was made in a hollow strait place. Thus is the *Testudo* or Tortoise made, and is so call'd from its Firmness, and its covering the Men on all sides.

IV. The *Testudo* spoken of by *Dion*, was what they made use of in the Field, and not in Sieges. *Justus Lipsius* attempted to describe it, and accordingly had it engrav'd and publish'd in his Book *Πολιορκητικῶν*; which the very learned Dr. *Potter*, Bishop of *Oxford*, also did after him; from both whom we have here given it, and added to it another sort of double *Testudo*³, which was thus made. The *Romans*, after they had form'd the *Testudo*, caus'd another Body of Men to mount thereon and form a second, by which means they sometimes equall'd the Height of the Walls of the Place they were besieging.⁴

The *Greeks*, *Romans* and *Gauls*, but especially those of *Berry*, and many other Nations, when they invested a Place, advanc'd by Mines and other subterraneous Works, by which they brought down the Enemy's Towers and Walls, until the Breach was big enough to enter in at. Of this History is full; tho' it must be own'd we are not so well instructed in the manner of their mining, as to be able to give a particular Description of it.

With regard to Cities and Fortresses, they were fortified with Towers, Walls, and strong Battlements, like most of our ancient Cities at this Day. Thus we see the City of *Verona* fortified in *Constantine's* Arch.

When we treated of the military Machines above, we took no notice of King *Demetrius's* *Helepolis*, describ'd by *Diodorus Siculus*, and by *Plutarch* in his Life of that Prince. 'Tis certain, however, that among the Machines given above, there's one which *Athenæus*, who publish'd it, says was *Demetrius's*; tho', by the way, it is not at all like that describ'd by *Diodorus* and *Plutarch*, as any one may see in the last, which is almost in every Bodies Hands. This *Helepolis* is marked 22 in Plate 29 above.

BOOK VI.

Of the Marks of Victory, the Trophies, Triumphs, Crowns,
and Triumphal Arches and Pillars.

CHAP. I.

I. The Greeks erected Trophies; their Form. II. Trophies of the Romans; III. Of Trajan. IV. Variety of Trophies.

I. THE Use of Trophies is of the earliest Antiquity. By the *Greeks* they were erected after a Victory in the very Field of Battle: But then the Trophy was nothing but a Stake, or Post, or Trunk of a Tree fix'd down in the Ground, and adorn'd with the Spoils of the Enemy. The Trees made use of for this purpose were principally the Oak and the Olive. In process of time, however, they made their Trophies of Stone, Marble or Brass; but these, *Plutarch* tells us, were not approv'd of, because they continued the Memory of former Discords and Contentions among the People by their Duration, upon which account, he adds, they ought to be made of other Materials that were not so lasting: And on this Consideration, the same Author says, it was, that the *Romans*, who repair'd all their old Buildings that were consecrated to the Gods, yet suffer'd those to perish that were loaded with the Spoils of Enemies. But the Trophy, according to the Scholiast upon *Aristophanes*, which the Ancients erected after a Victory, was no more than this: They either built a Wall, or set up a large Stone, upon which they wrote the Advantages they had gain'd over the Enemy; and to this they gave the Name of Trophy, from the *Greek Word* *τεγνι*, which signifies the Flight of the Enemy. These Monuments, however, were not always thus made. It was likewise a Custom to consecrate the Trophies to some Deity, it being common with the Pagans, as has been above observ'd, to make every thing a matter of Religion. Most of the Trophies of this kind that occur, are made of the Trunk of a Tree, loaded with Cuirasses, Helmets, Shields and other Armour; tho' instead of the Trunk of a Tree, the Trophy was sometimes hung upon a Column. The Cuirass was also often plac'd there, and fitted to it in the same manner as to a human Body, and the Helmet plac'd above; so that the Trophy appear'd almost like a Man in Armour. The Trophy was commonly erected, as has been observ'd, in the Field of Battle, which Custom was immemorial among the *Greeks*, as may be seen in their most ancient Historians, *Herodotus* and *Thucydides*.

II. The *Romans* erected Trophies almost in the same manner as the *Greeks*. *Æmilius*, *Florus* says, after having conquer'd the *Gauls* that inhabited the *Alps*, erected a Trophy of Gold to *Jupiter*. *Fabius Maximus Æmilianus* also, according to *Strabo*, erected one of white Stone at the Conflux of the *Isara* and the *Rhone*, where, with a small Army of less than thirty thousand Men, he had defeated the *Gaulish* Army of two hundred thousand. *Florus* again in another place says, that *Domitius Ænobarbus* and *Fabius Maximus* erected Stone Towers in the Field of Battle, and plac'd Trophies above them adorn'd with the Spoils of the Enemy: But this does not seem to agree with what *Plutarch* said above.

This way of erecting Towers for Trophies has been imitated in later Ages, the Columns of *Trajan* and *Antoninus* being no other than round Towers, which they ascended by a winding Stair-case. These are real Trophies, loaded not only with the Arms of conquer'd Nations, but also with Battles, Sieges and other military Actions. Trophies were also wrought in Bass-Relief upon Marble Tables; of which kind I happen'd to meet with a very elegant one in my way from *Puteoli* to *Solfatara*, but had not time to have it *design'd*. We have here, however, produc'd so great a number of Trophies, that the other may very well be spar'd. Sometimes these Trophies had Inscriptions under them, signifying upon what Occasion they were erected; but this Custom was not always observ'd.

III. The two great Trophies found upon *Trajan's* Column¹, are plac'd at the right and left of a *Victory* writing upon a Shield, in the manner we often see upon Medals. The Trophies are plac'd upon large Trunks of Trees; the one of which, facing the Victory, has a Cuirass, a Helmet and two Arms, which together makes it appear like a human Figure arm'd, with a long Sword on his right side. At the end of the right Arm is the Dragon, the Ensign of the *Daci*, two Shields, two Javelins, and the *Dacian* Sword in the shape of a Sickle. In the left Hand is an Ax, a Dragon, two Shields and two Javelins. At the Foot of the Trophy is a heap of Dragons their military Ensigns, oval Shields, Helmets, Axes, Javelins, crooked Swords and Standards. On the other side, instead of a Cuirass is a kind of *Pallium* or *Chlamys*, the rest almost the same as in the other Trophy.

PLATE
XXXI.
1

IV. The Trophies we meet with upon Medals, are of very different kinds: Sometimes Men are represented in a Posture of Sorrow, sitting upon Heaps of Armour, and leaning their Head upon their Arm, like Persons in Affliction. At other times you see Captives sitting upon a Heap of Shields before a Trophy made in the usual manner; which Captives thus set have their Hands tied behind them in some Medals, and in others they stand upright, and have a heap of Armour at their Feet.

Eight Reverses of Medals are represented in this Plate, all which exhibit some Victory. The first² is a winged *Victory*, putting a Shield upon the Trunk of a Tree, upon which Shield is inscrib'd VIC. DAC. *Victoria Dacica*. The second³ is a Woman, holding a Crown in one Hand, and in the other a Palm-branch. The third⁴ a winged *Victory*, holding one Hand upon a Trophy, and in the other a Palm-branch. The fourth⁵ is a Figure holding a military Ensign, and a little *Victory* upon the other Hand. The fifth⁶ holds a military Ensign and a *Caduceus*. The next⁷ represents the Emperor holding the Thunderbolt, and a *Victory* crowning him. The two last⁸ have nothing particular in them.

C H A P. II.

I. *A Dispute about the Trophies of Marius.* II. *Other Trophies.* III. *Some remarkable Trophies.* IV. *The Trophy before the Hind of Sertorius.*

I. **W**E come now to a grand Question started not long since, and which remains yet in Dispute. The thing is this: Whether the Trophies, call'd for many Ages together the Trophies of *Marius*, are really the Trophies of that *Roman* Captain, or of some other. Now all Parties are agreed in this, that

for many Ages, and before ever they were carried from the *Castrum aquæ Martiæ* to the Capitol, they bore the Name of the Trophies of *Marius*. But *Bellori*, notwithstanding this Prescription as it were, is of a different Opinion, and maintains that these Trophies are Monuments of *Trajan's* Victories over the *Daci*. To this, if it should be objected that the *Hexagon* Shields agree better with the Usage of the *Germans*, than of the *Daci*, whose Shields were commonly oval, he will readily answer, that the *Daci* had Shields of both those Forms, which he will prove by an Example in *Trajan's* Column. He also produces another Proof of their being *Trajan's*, from the *Castrum aquæ Martiæ* from whence these Trophies were taken, because *Trajan* repair'd and improv'd the *Aqua Martia*, according to *Frontinus*: Besides, the Resemblance of these Trophies with those of the Column, the exact Agreement in the military Ensigns, the Beauty and Elegancy of the Sculpture, and the very Turn these Trophies have with the other upon the Column, all favour this Opinion. To which may be added, that the Ram seen among the Arms of the Trophy, agrees also very well with the *Daci*, who made use of that Engine in Sieges, and that the fring'd Robe of the conquer'd Province agrees likewise with the Habit worn by the Chiefs of that People.

But notwithstanding all these Arguments, *Mr. Fabretti* is of a contrary Opinion; and insists that it ought first to be prov'd that the *Castrum aquæ Martiæ* was repair'd by *Trajan*, for neither *Frontinus* nor any other have ever affirm'd it: He also maintains, which is yet stronger, and more to his purpose, that this *Castrum* never serv'd the *Aqua Martia*, that the Trophies said to be *Marius's* are of a different Taste from those in *Trajan's* Column; and that the Sculpture of them also is by far less elegant. To these he adds other Reasons, and at length concludes that the thing ought to remain in Uncertainty at least, especially seeing *Cittadini* assures us, that he found under one of these Trophies, before they were remov'd, an Inscription which seems to attribute them to *Domitian*; tho' to say the truth, that Inscription is so mutilated in many places, that nothing certain can be drawn from it. Upon the whole therefore, I think, nothing ought to be positively asserted concerning them. We have however exhibited these Trophies
9 from the Gravings taken of them about a hundred and fifty Years since.

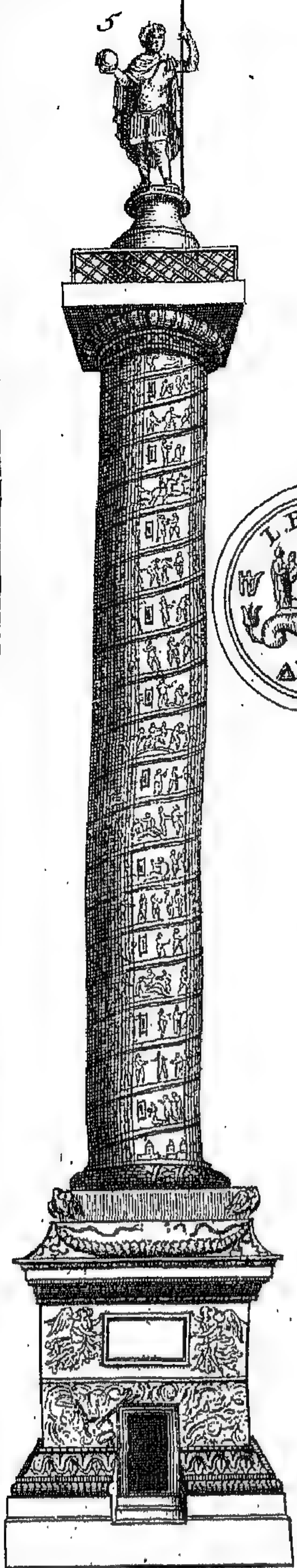
II. *Viriathus*, General of the *Lusitanians*, *Florus* says, after having defeated the *Romans*, erected Trophies upon the Mountains, where he put the *Roman* Habits he had taken, call'd *Trabeæ*, and the *Fasces*, the Ensigns of consular Dignity.

The following Part of the Plate exhibits to us Trophies of different sorts; as
10, 11 for Instance, Captives bound at the Foot of the Trophy¹⁰; Heaps of Armour¹¹;
12 Women set weeping¹², which are Symbols of conquer'd Provinces. There is a
13 Soldier upon a March¹³, holding a *Victory* in one Hand, and in the other a Tro-
14 phy resting upon his Shoulder: And a Woman holding a Palm-branch¹⁴, which she rests upon the Ground.

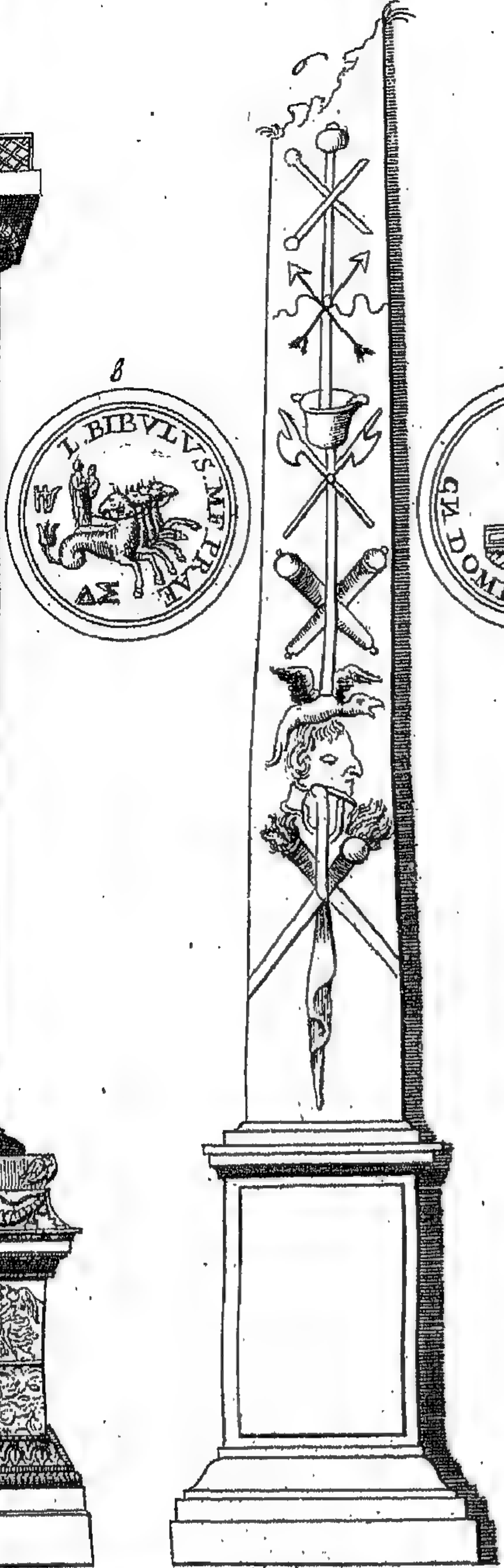
15 III. The Plate represents likewise a King or Emperor victorious¹⁵, sitting upon Armour, while the conquer'd Party bends the Knee before him: Two Soldiers standing hold each of them a Pike. *Maffei* thinks it something difficult to say what Piece of History this represents; notwithstanding which he advances as a slight Conjecture, that it may be *Porus*, an *Indian* King conquer'd by *Alexander*, who here presents himself before him in a suppliant Posture. But this I think also ought to be left among the Uncertainties.

16 The naked Man setting a Laurel upon an Altar¹⁶, is a Mystery that I understand not. The following Image is also altogether symbolical: There a *Victory*
17 crowns a Soldier¹⁷, who has hold of a Ram by the Horns, and between the *Victory* and Soldier is a Crab; so that here are two of the Signs of the Zodiack.

There



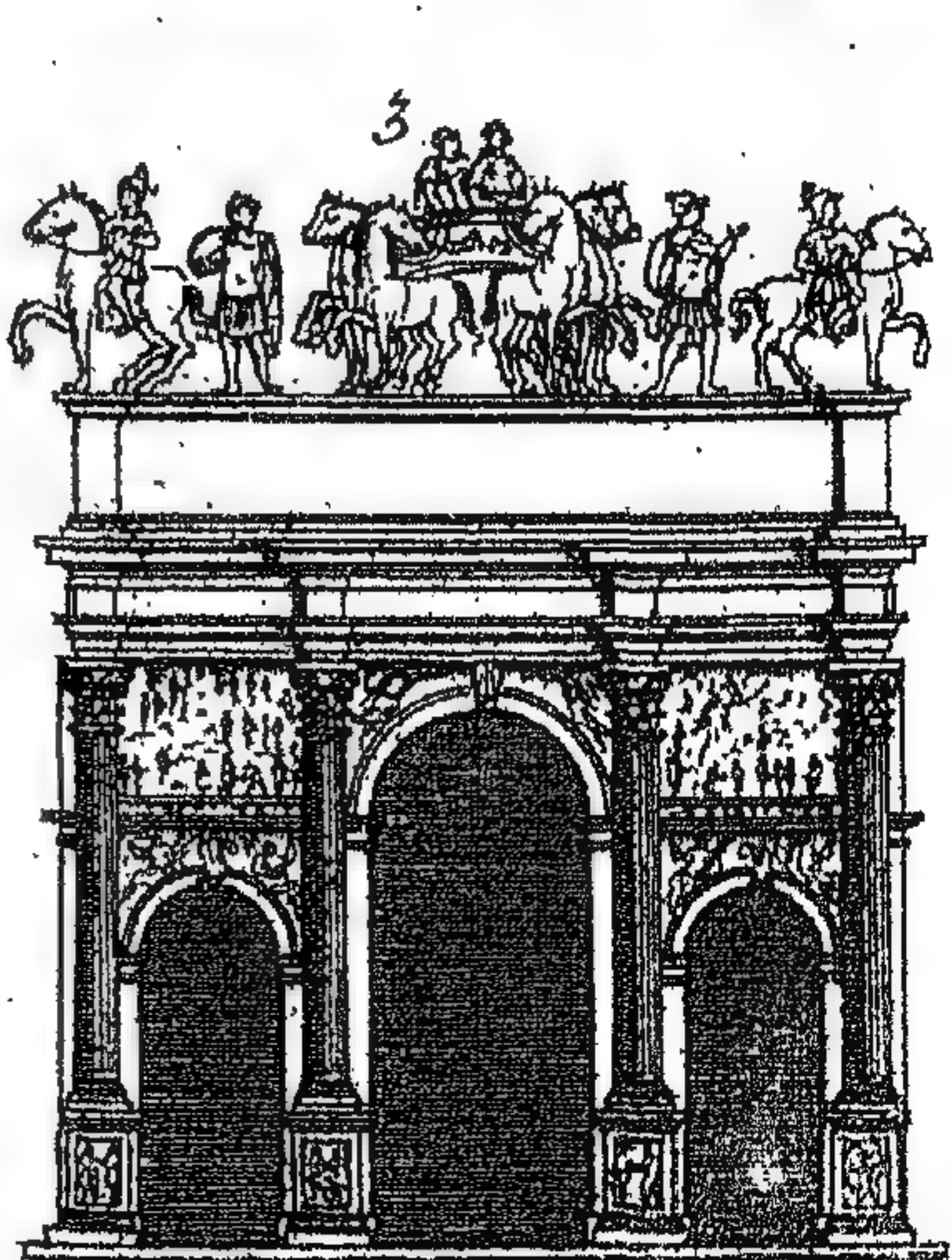
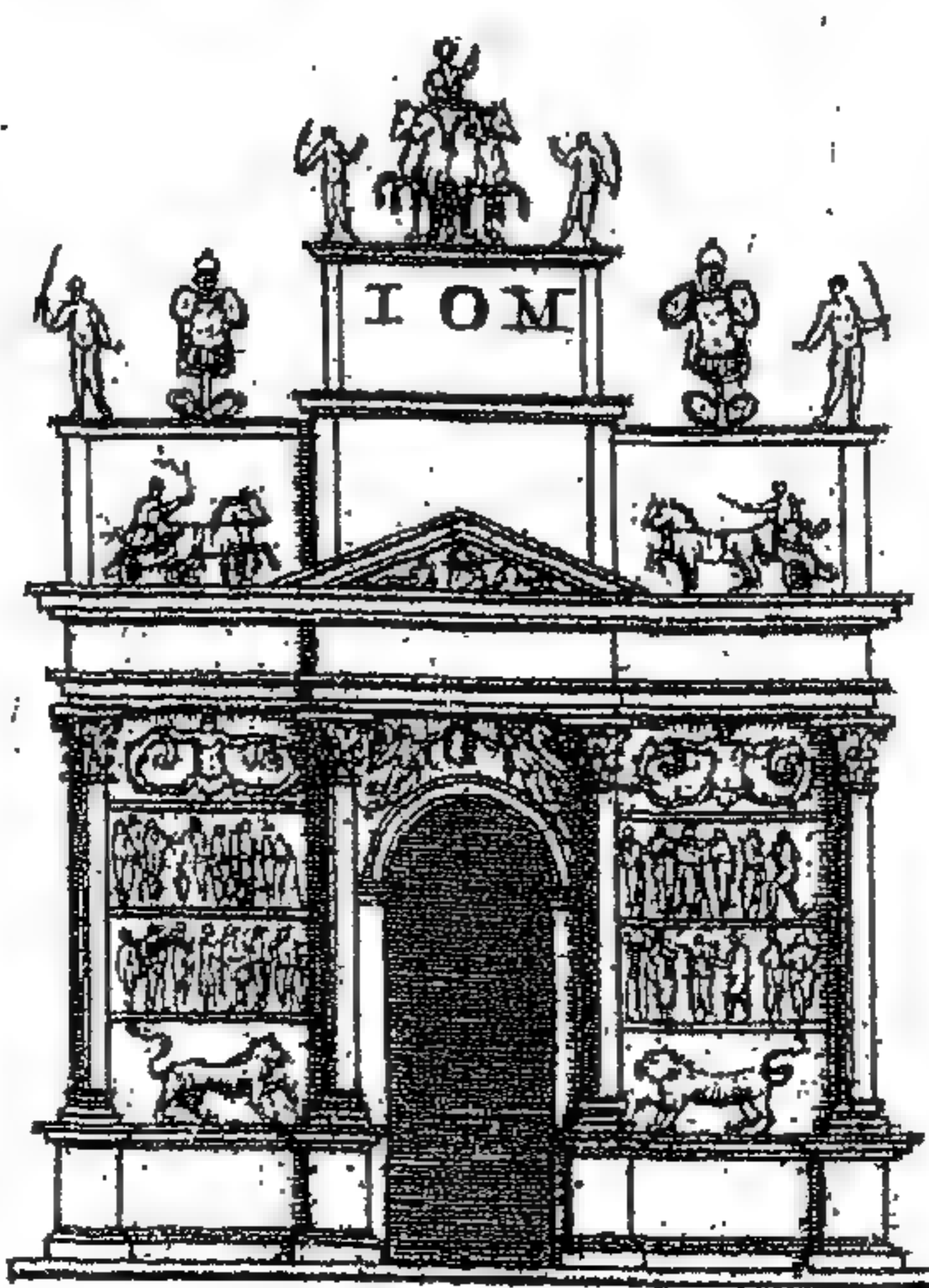
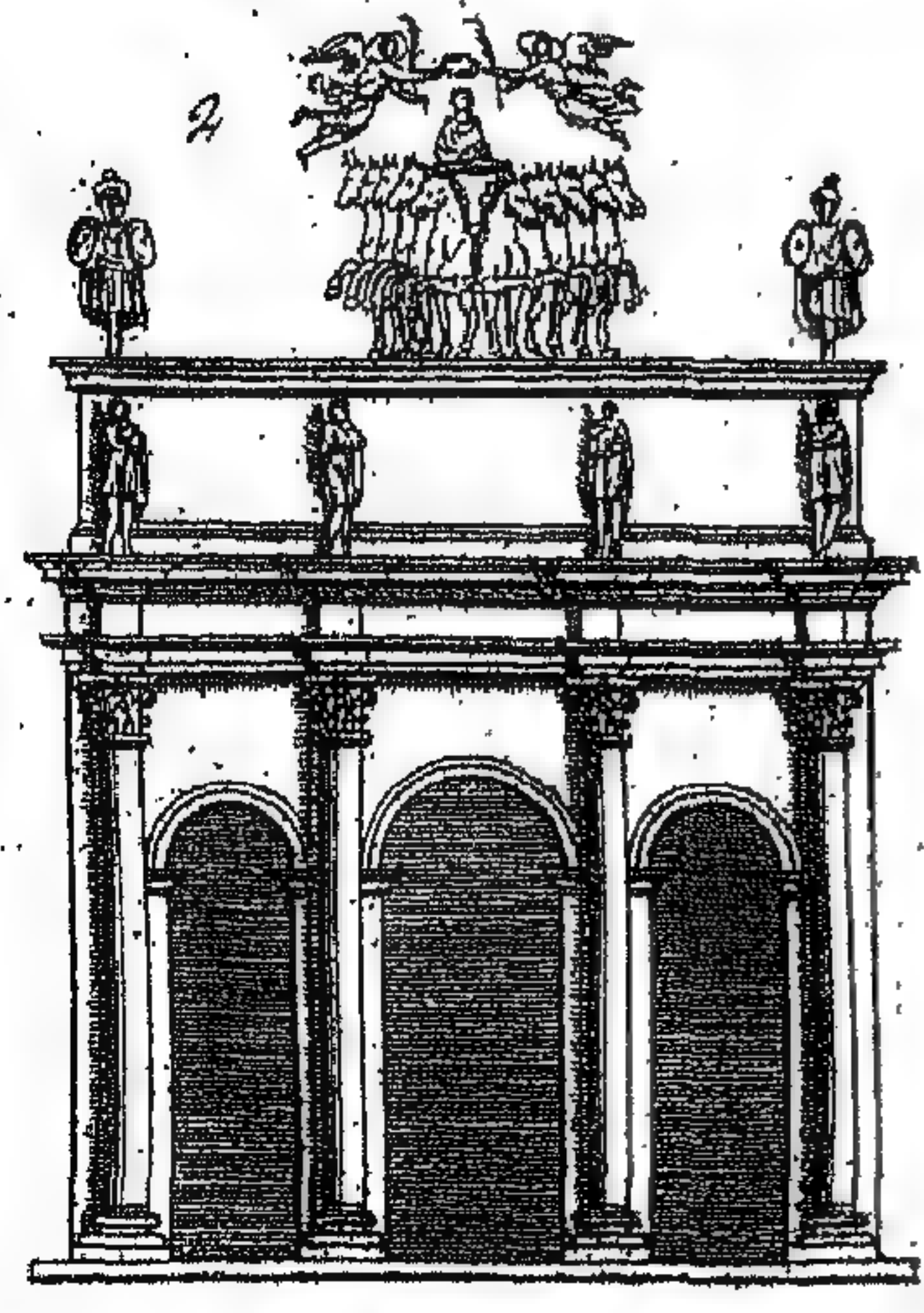
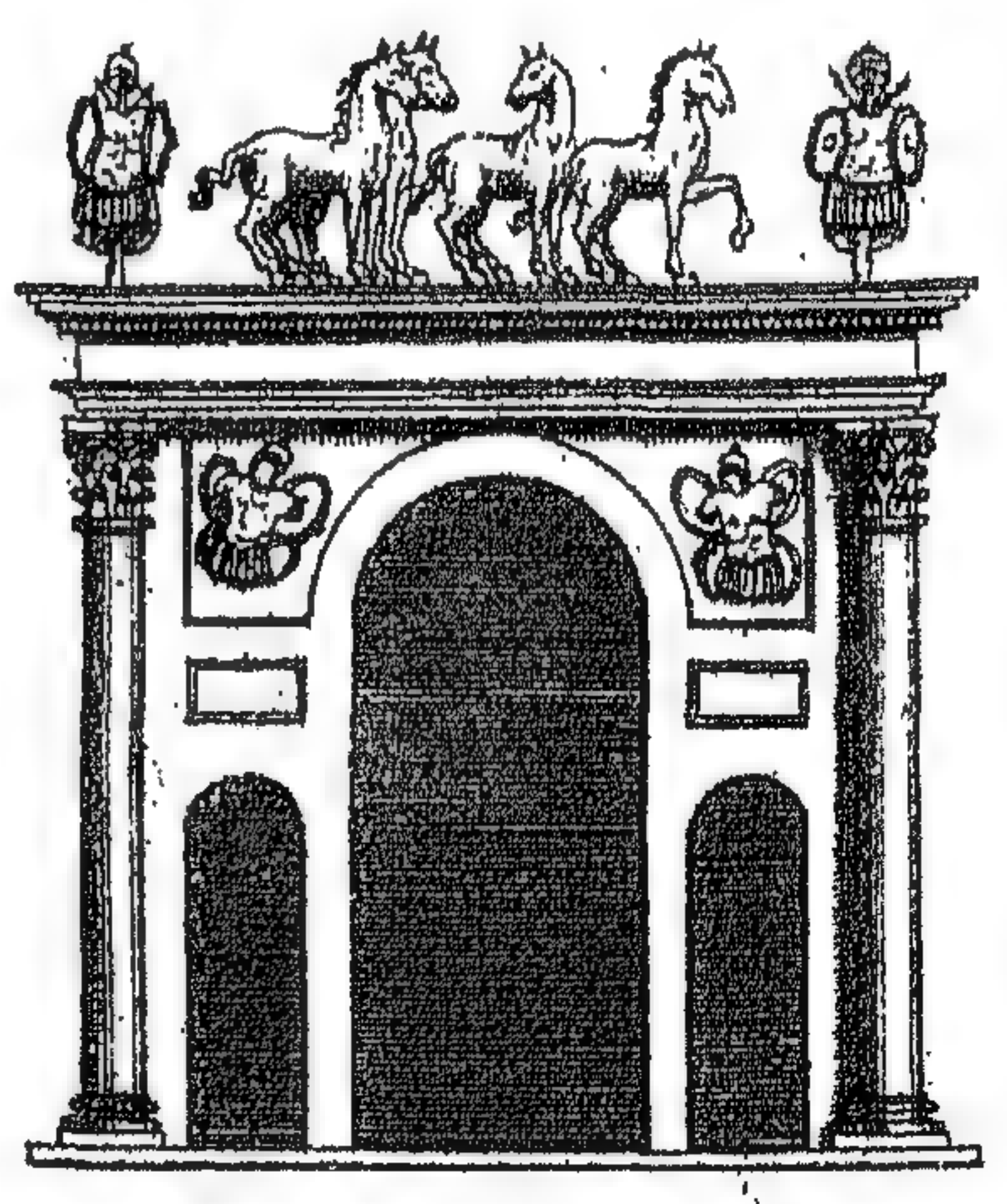
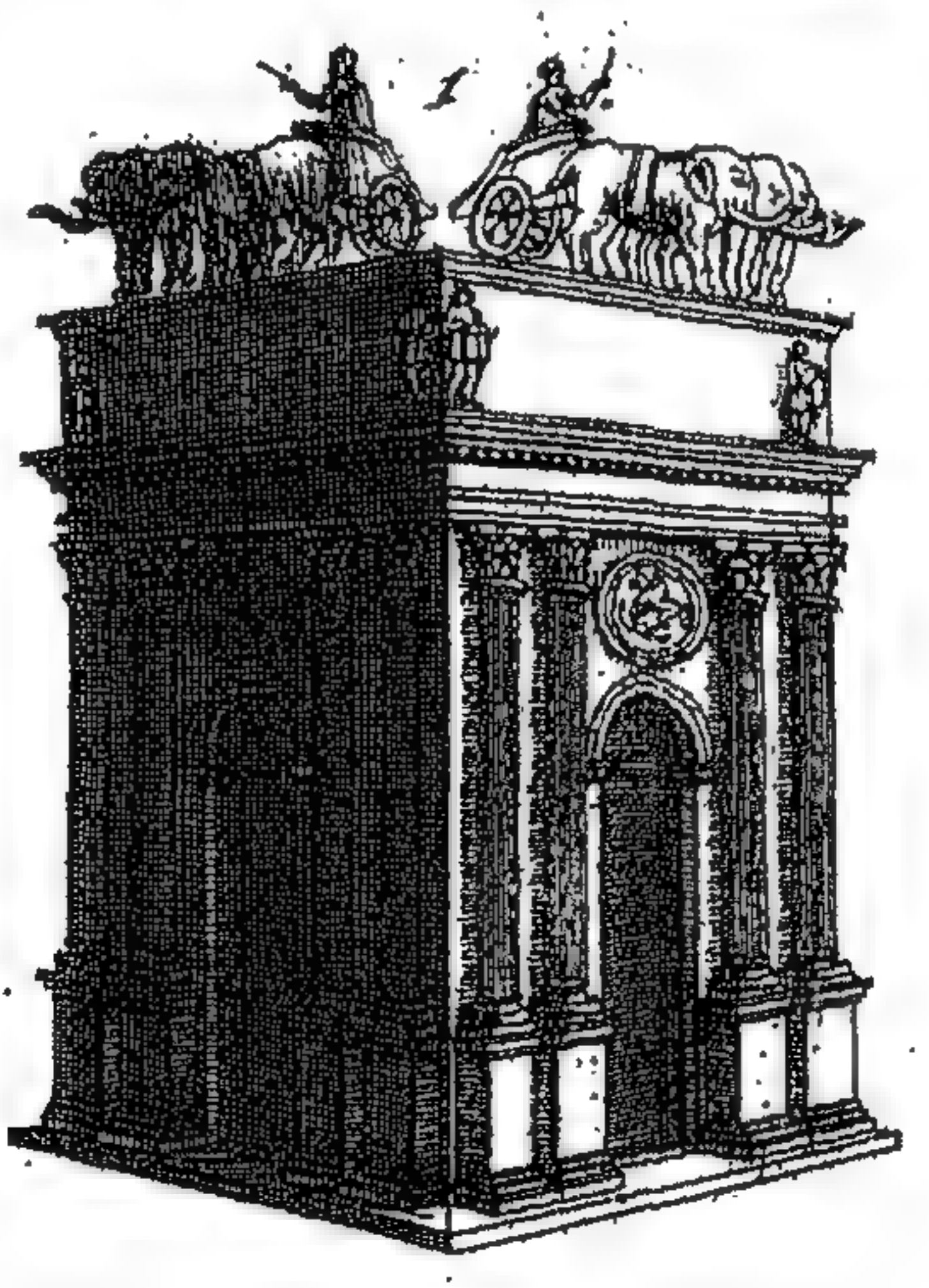
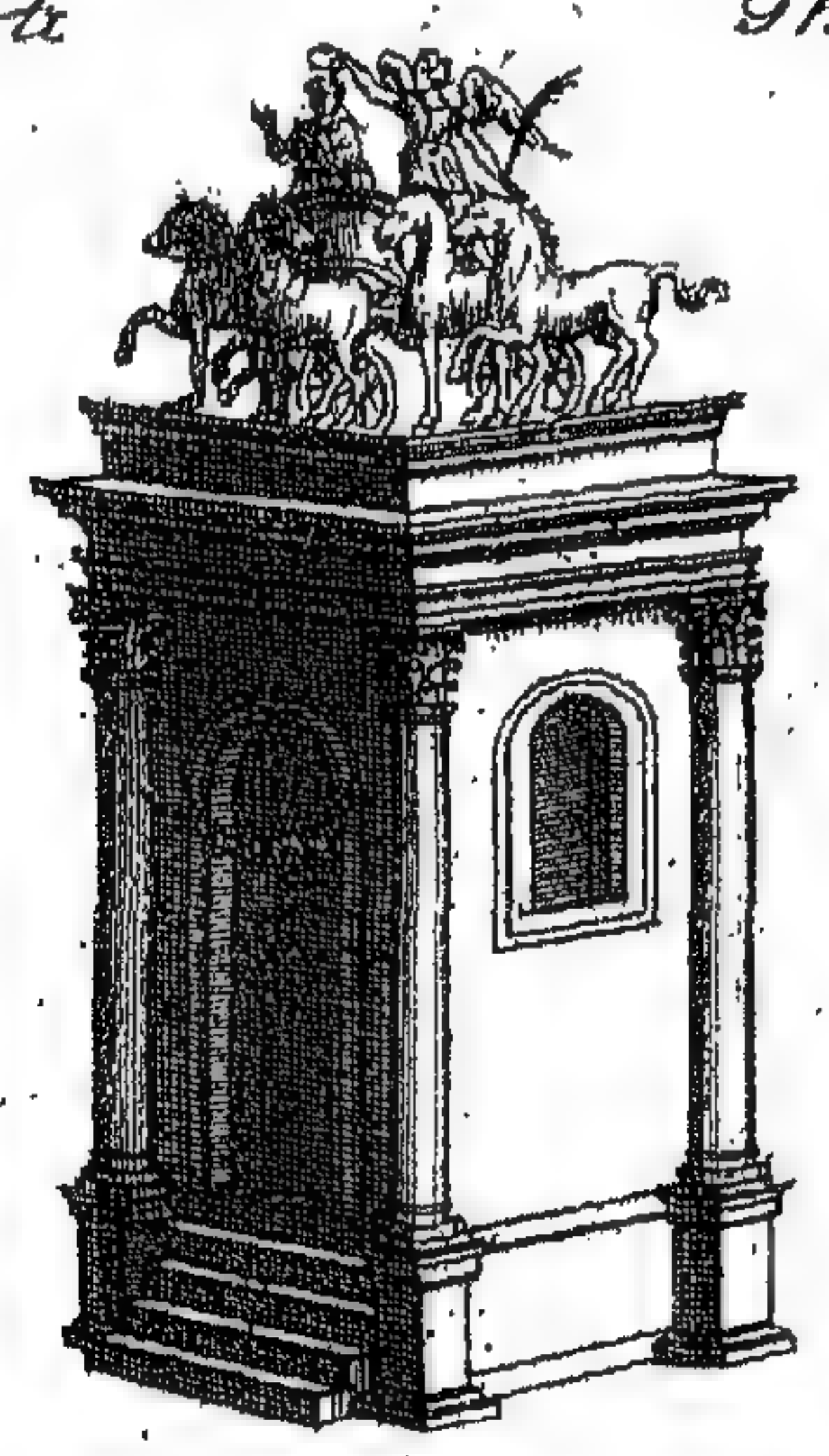
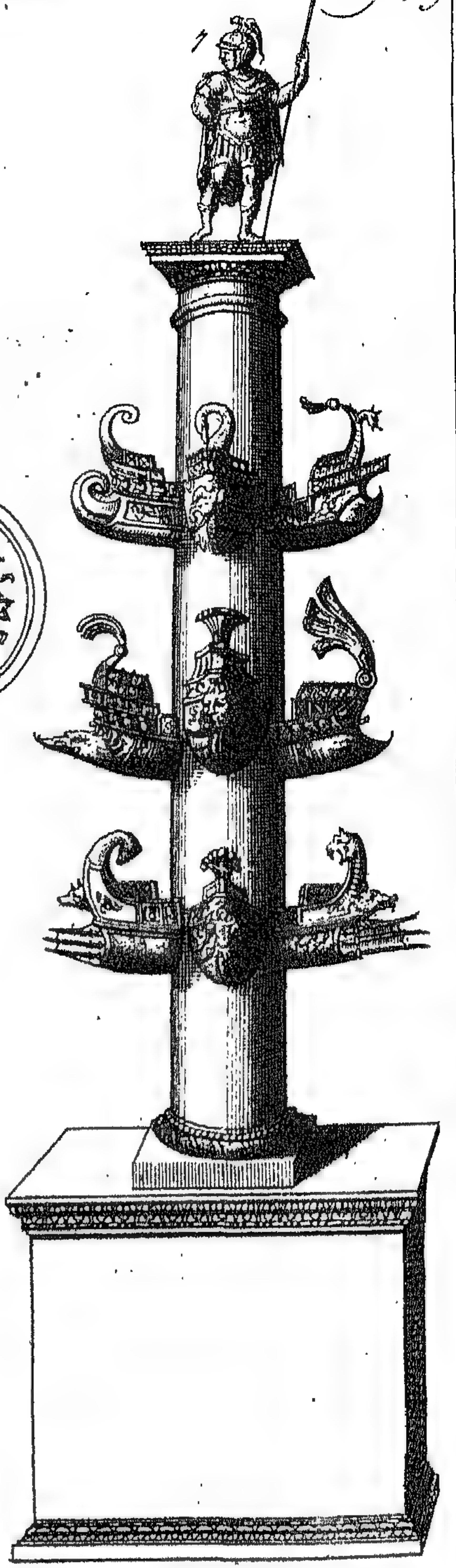
Bartoli



Thiroux



Bartoli



There is in these, no doubt, some secret Meaning, upon which one might produce several Conjectures, but all of equal Uncertainty. Another Image¹⁸, which is broken at the top, denotes probably a *Victory* of *Trajan* or *Septimius Severus* over the *Parthians*. The Habit of a captive Soldier fasten'd to the Trunk of a Tree, with his Hands bound behind him, might as well be suppos'd the Habit of a *Dacian* as of a *Parthian*, were it not for the Bow and Quiver fasten'd at the top of the Trunk as a Trophy, which seems to determine him to be a *Parthian*, these being their usual Arms. The following Eagle¹⁹ plac'd upon a Column, and holding in his Beak a Crown of Laurel, is the Mark of a Victory: The two military Ensigns plac'd upon two *Cornucopiæ*, denote also that this Victory produc'd Plenty of all things; as the two Dolphins below signify it to have been a Naval Victory: And indeed they were Naval Victories chiefly which did produce Plenty, by procuring Navigation, and thereby a free Transportation of Corn.

IV. The Hind represented before a Trophy²⁰ is thought to be *Sertorius's*, taken notice of by *Plutarch* in the Life of that great Captain. This Hind was so tame and tractable, that she follow'd *Sertorius* in all his Expeditions, without being alarm'd with the Noise of Arms, or the Cries of Soldiers. That skilful General took Advantage of this Familiarity of the Hind, and of the Credulity of a barbarous and superstitious People, and pretended she was sent to him from *Diana* to advise him in what he was to do, and to discover to him the secret Designs of the Enemy: By which Artifice he kept the *Spaniards* in fear; who, whenever he or any of his Captains obtain'd a Victory any where, were sure to ascribe the Success to the Advice of his Hind. One of these *Victories* is denoted by the Trophy which we see before the Hind.

The remaining Part of the Plate is also full of Trophies, and Marks of Victory, all different from one another, concerning which we have nothing new to observe.

C H A P. III.

I. *The Triumphs of the Greeks.* II. *The Triumphs of the Romans.* III. *The Laws of the Roman Triumph.* IV. *The Order and Manner of the Roman Triumph.* V. *The Honours after the Triumph.*

I. **T**HE principal Honour after a Victory obtain'd, was a Triumph, a Custom that prevail'd not only among the *Greeks* and *Romans*, but also in other Nations, tho' in a very different manner. *Bacchus* is said by Mythologists to be the Author of Triumphs, and that after his *Indian* Expedition he triumph'd upon an Elephant. The *Greeks*, who, as we have observ'd, erected Trophies after a Victory, decreed also a Triumph to the General, when he had either kill'd the Enemy's General, or entirely routed their Army, so as to make them lay down their Arms. This Triumph consist'd either in a magnificent Entry, or else in a large Sail call'd *Peplon*, in which were represented the great Actions and Exploits of him that triumph'd: This Sail was expos'd in publick, and afterwards consecrated in some one of the Temples as a Monument of Victory. The Triumpher also was honour'd with an Elogium made in publick. The *Lacedemonians* honour'd their General, when he had fought valiantly, and conquer'd the Enemy with great Slaughter,

Slaughter, with the Sacrifice of a Cock to the Gods; but when by his Dexterity he had put an end to the War without any great Effusion of Blood, they then sacrific'd an Ox, by this intimating how much they prefer'd a General who conquer'd by his Conduct and Address, to one who bought a Victory with the Loss of a great deal of Blood. It was also customary to decree Triumphs to those that conquer'd in the *Olympick*, *Pythian*, *Isthmean* and *Nemean* Games, so that, according to *Vitruvius*, they were not only honour'd in the Assembly with a Crown and Palm, but had also the Honour of returning to their own Country and Home in triumphal Chariots.

II. But nothing ever equalled the Triumphs of the *Romans*, especially when they had extended their Territories beyond *Italy*, and their Generals return'd with Victory from abroad, and with the Conquest of foreign Provinces. Nay, they made Laws concerning Triumphs, in which every thing relating thereto was particularly order'd, to prevent Disputes and Contests that might happen to rise when Triumphs were decreed, which they frequently did in Honour of some or other. In our Description of a Triumph we have been beholden to *Onuphrius*, *Maderus* and *Laurentius*, and to what they have writ have added some particular Observations of our own.

III. It was first forbidden in their Laws, that any should have the Honour of a Triumph who had not defeated an Army of full five thousand Men at the least, and that after a fair Declaration of War; for an Act of Hostility committed before War was declar'd, tho' with never so great Success, was not thought worthy of a Triumph.

The second Condition was, that he who had conquer'd was to be either Dictator, or Consul, or Prætor, and to have been appointed General by the Republick under some one of these Qualities, or else he could not be honour'd with a Triumph for a Victory: And for this reason it was that *Scipio Africanus* did not triumph, after he had driven the *Carthaginians* from *Hispania Boetica*. *Cornelius Lentulus* and *Pompey* were however exempted from this Condition, and had a Triumph granted them.

The third Condition was, that he who sued for the Honour of a Triumph, was to send Letters to the Senate wrapt up in Laurel, and to stay with out the City, and wait for the Senate's Consent; which being obtain'd, it was brought to the People, who were therein desir'd, that, on the Day of the Triumph, the Triumpher might have full Power to command; which was what the People only could grant.

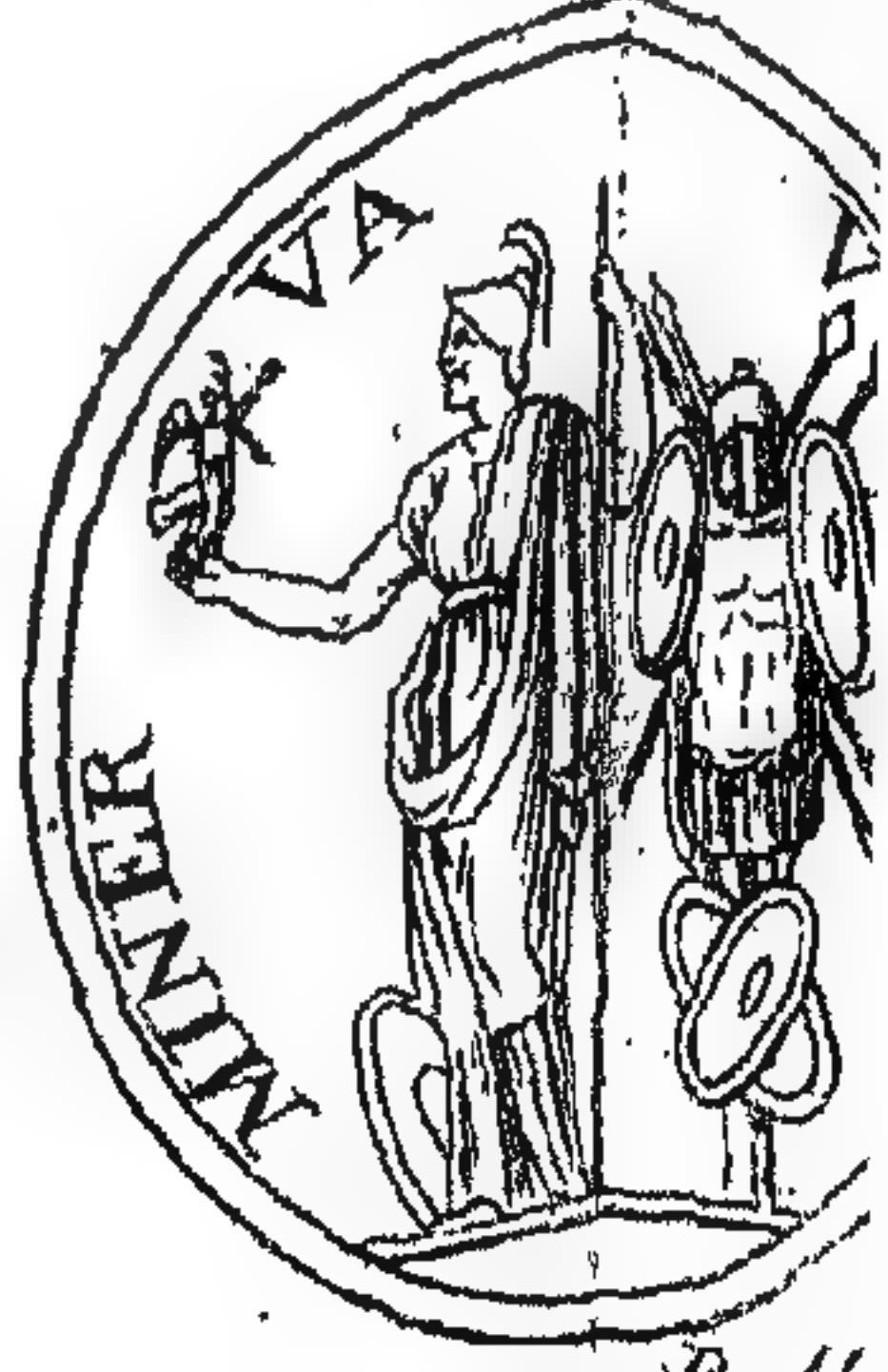
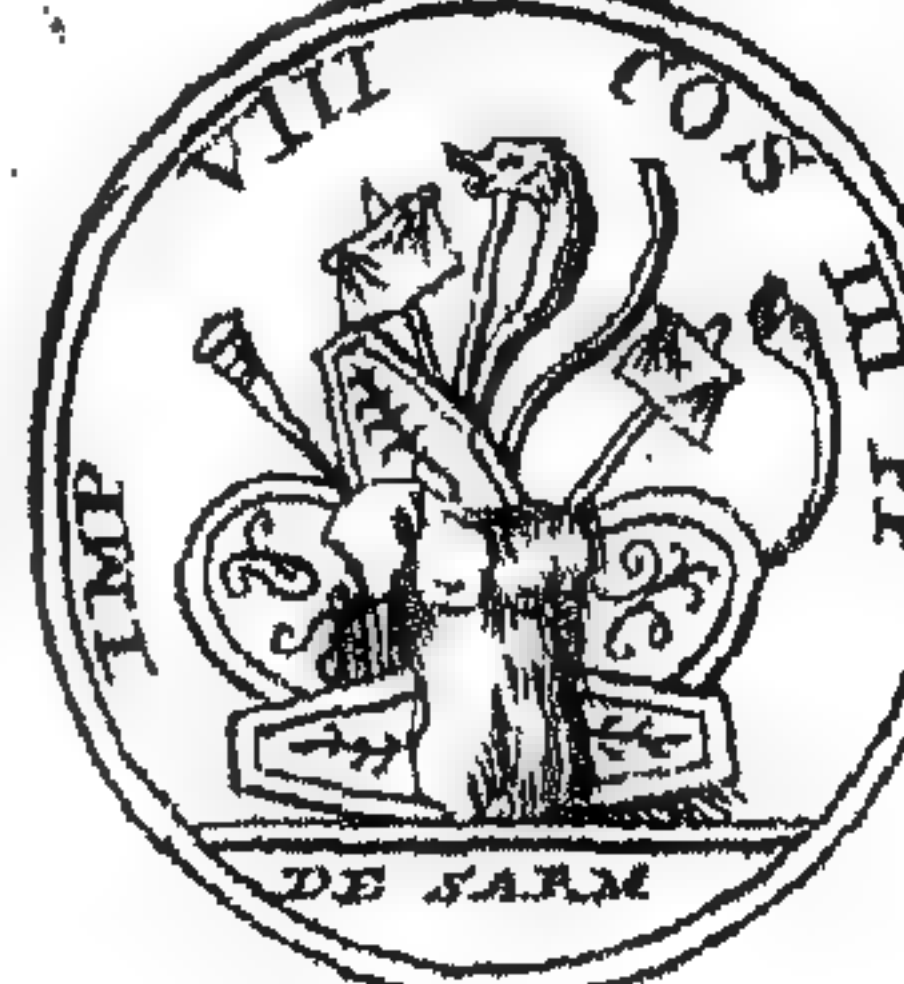
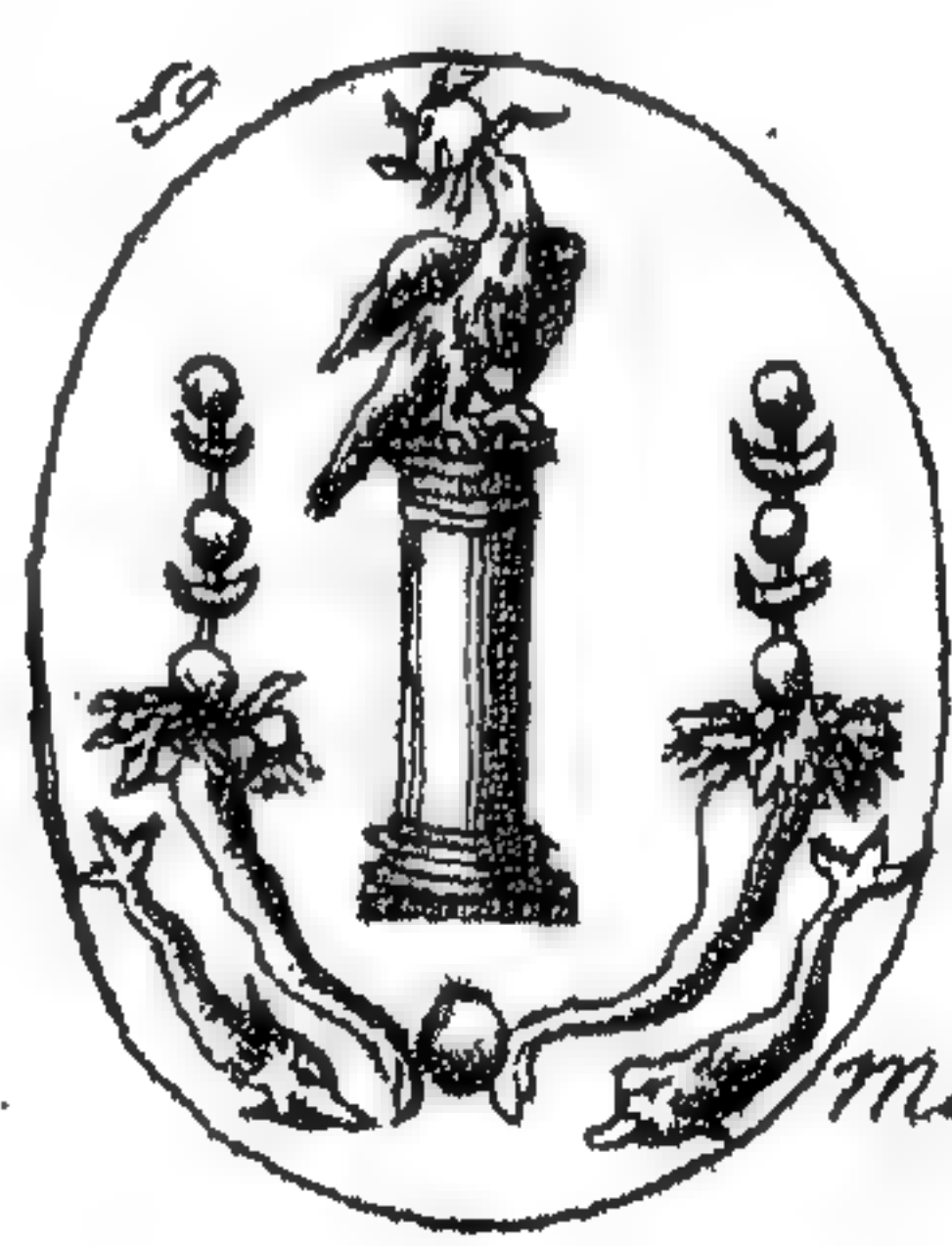
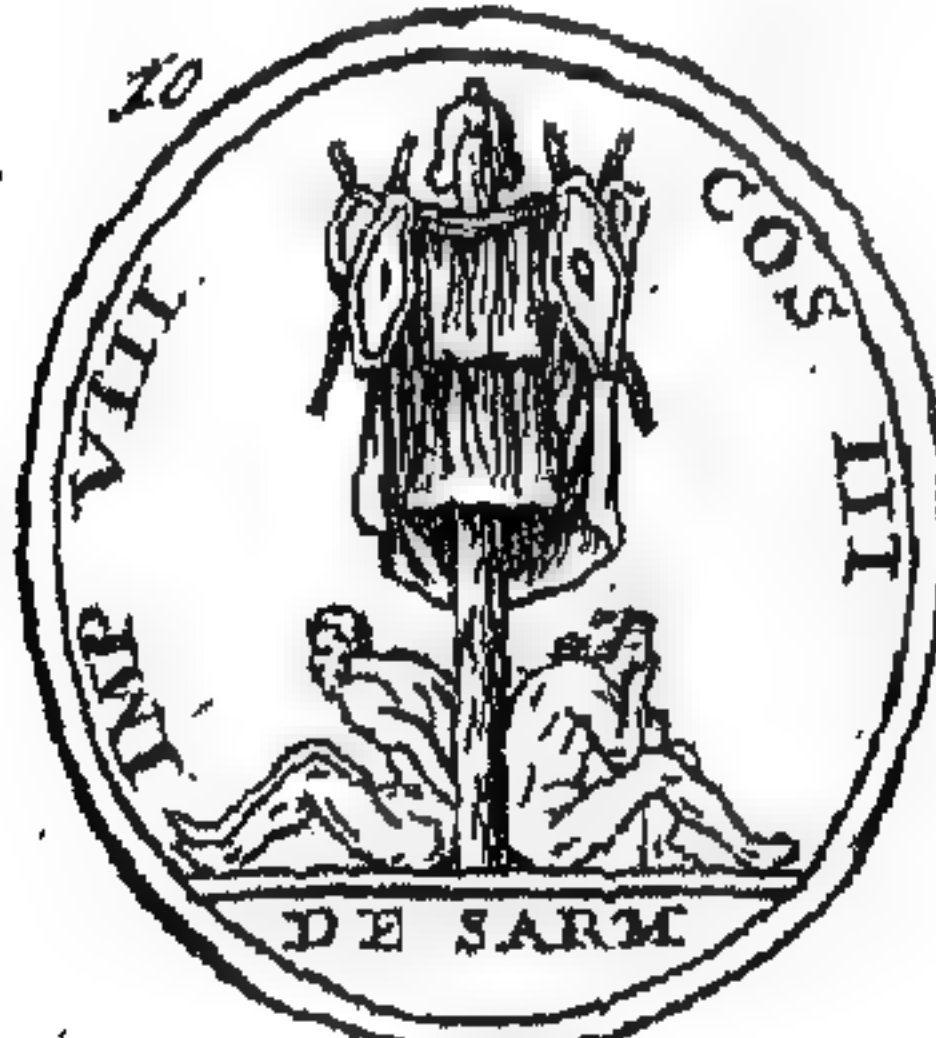
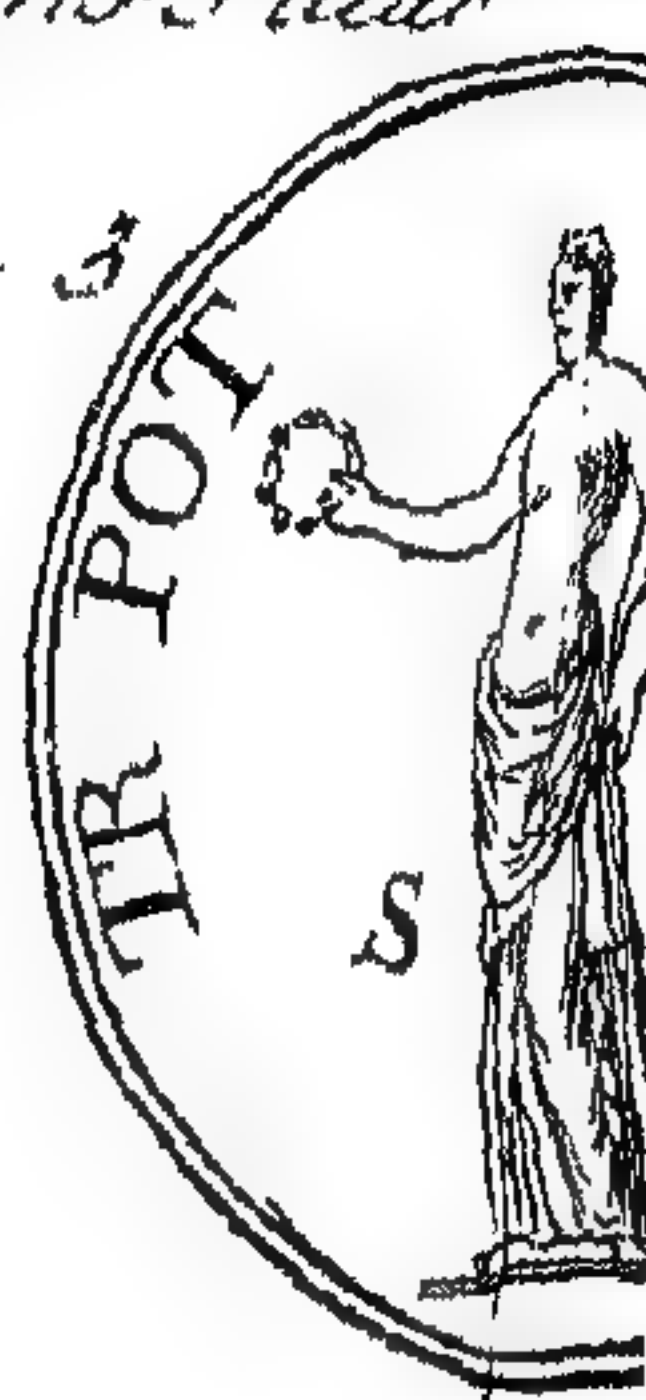
The fourth was, that no one should triumph that had not commanded in Person, and conquer'd within his own Province, and not in another's; nor that had not put an end to the War, and that too without any considerable Loss on the *Roman* side, least otherwise the Sorrow for so much Blood-shed should be greater than the Joy of the Triumph.

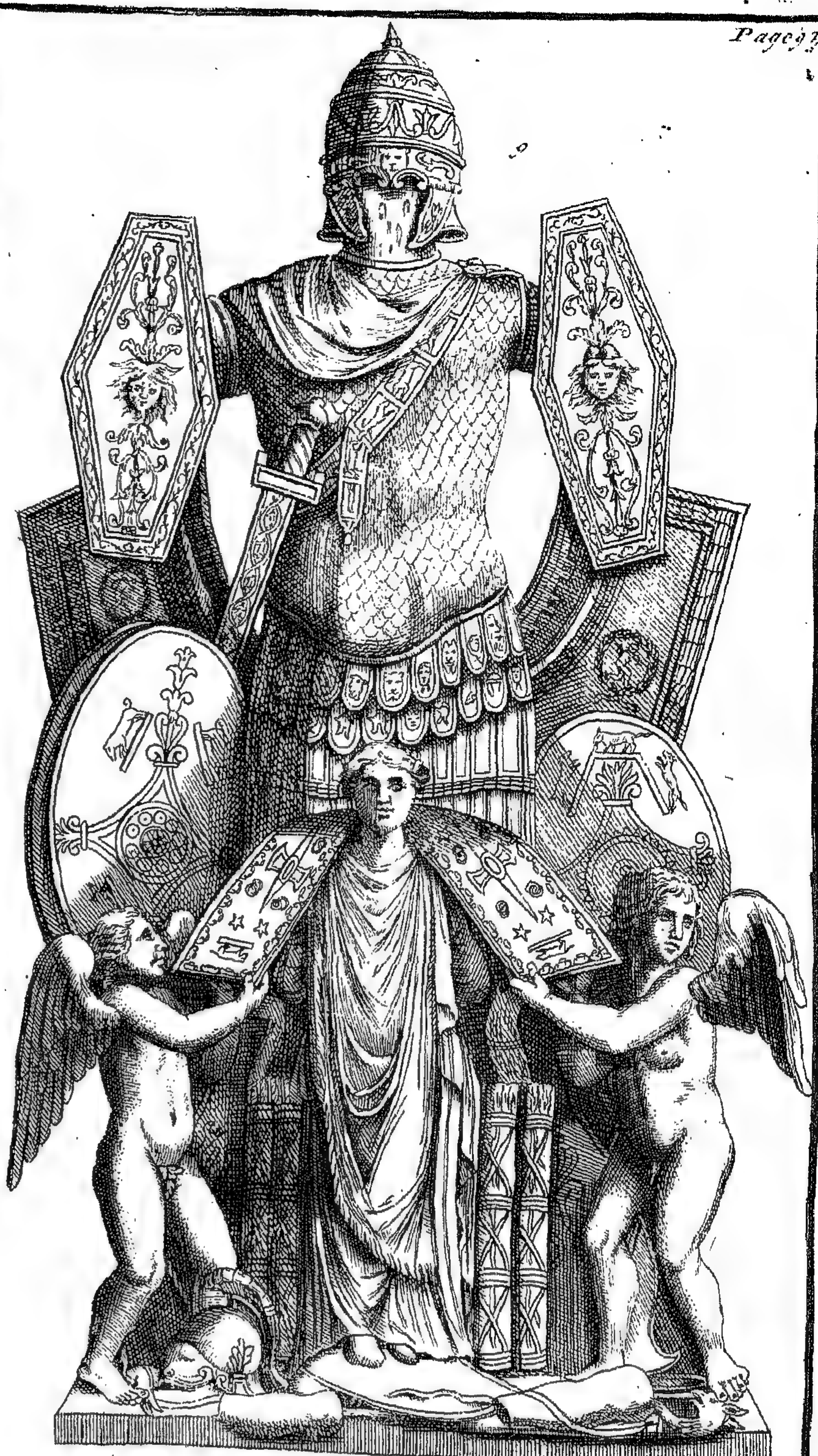
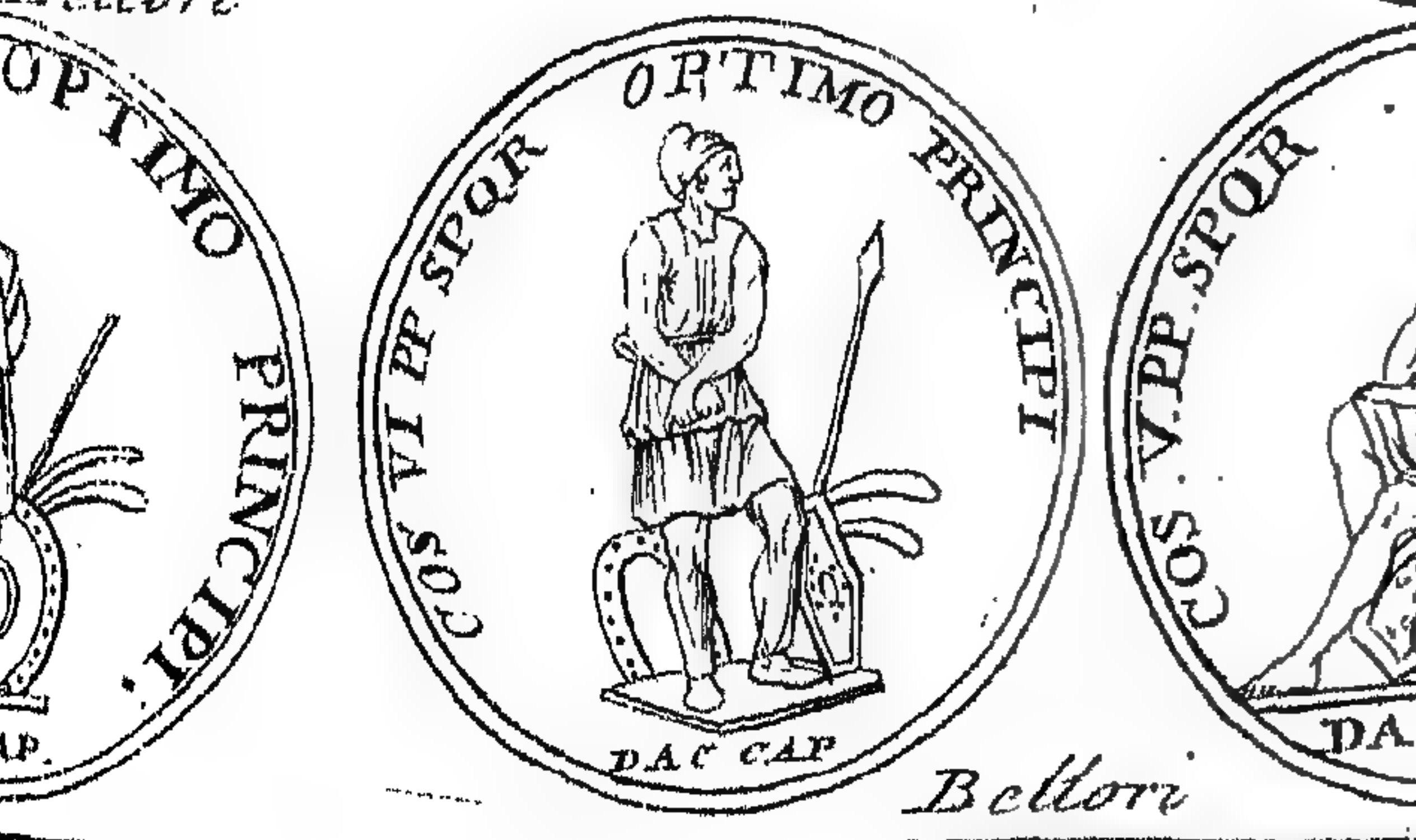
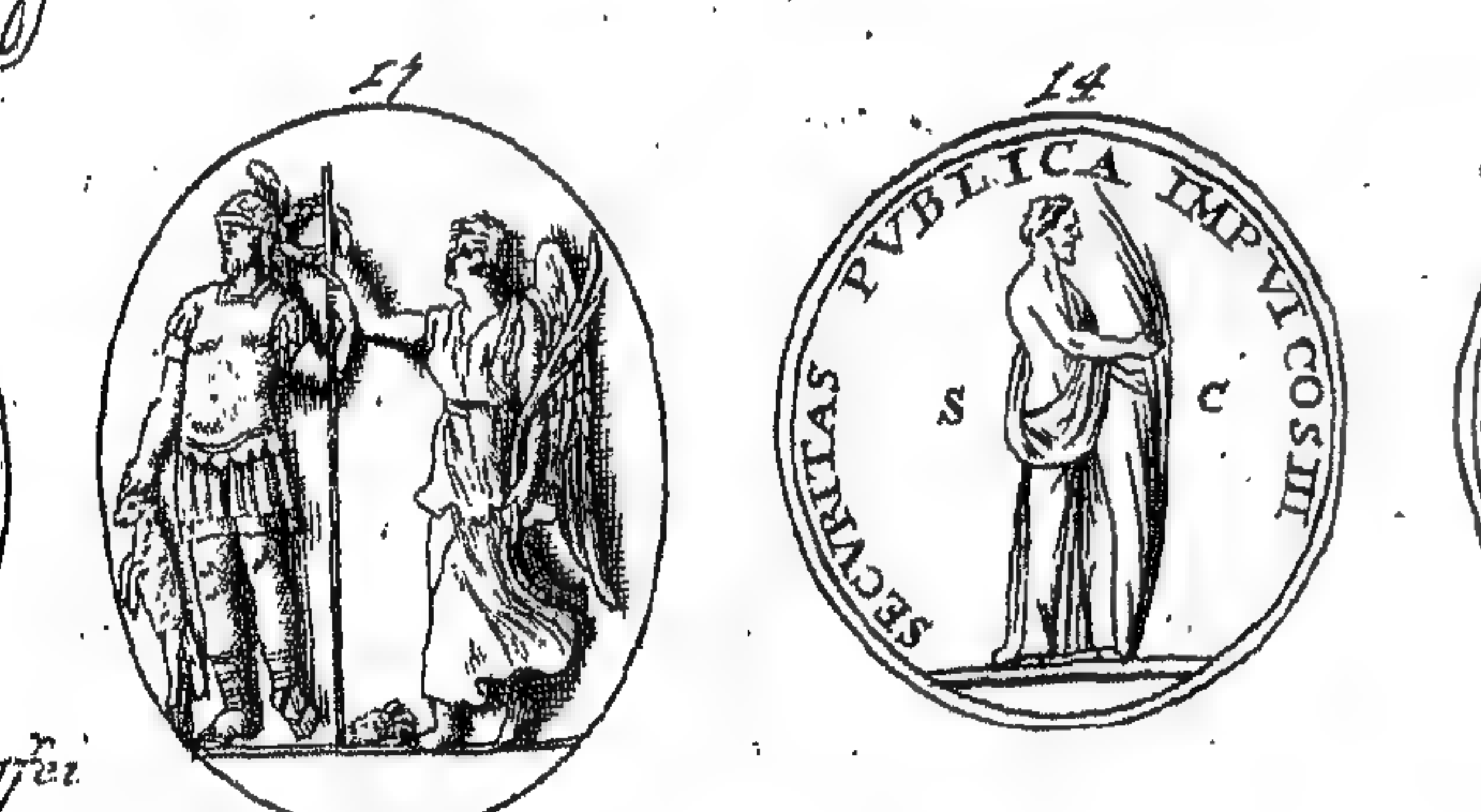
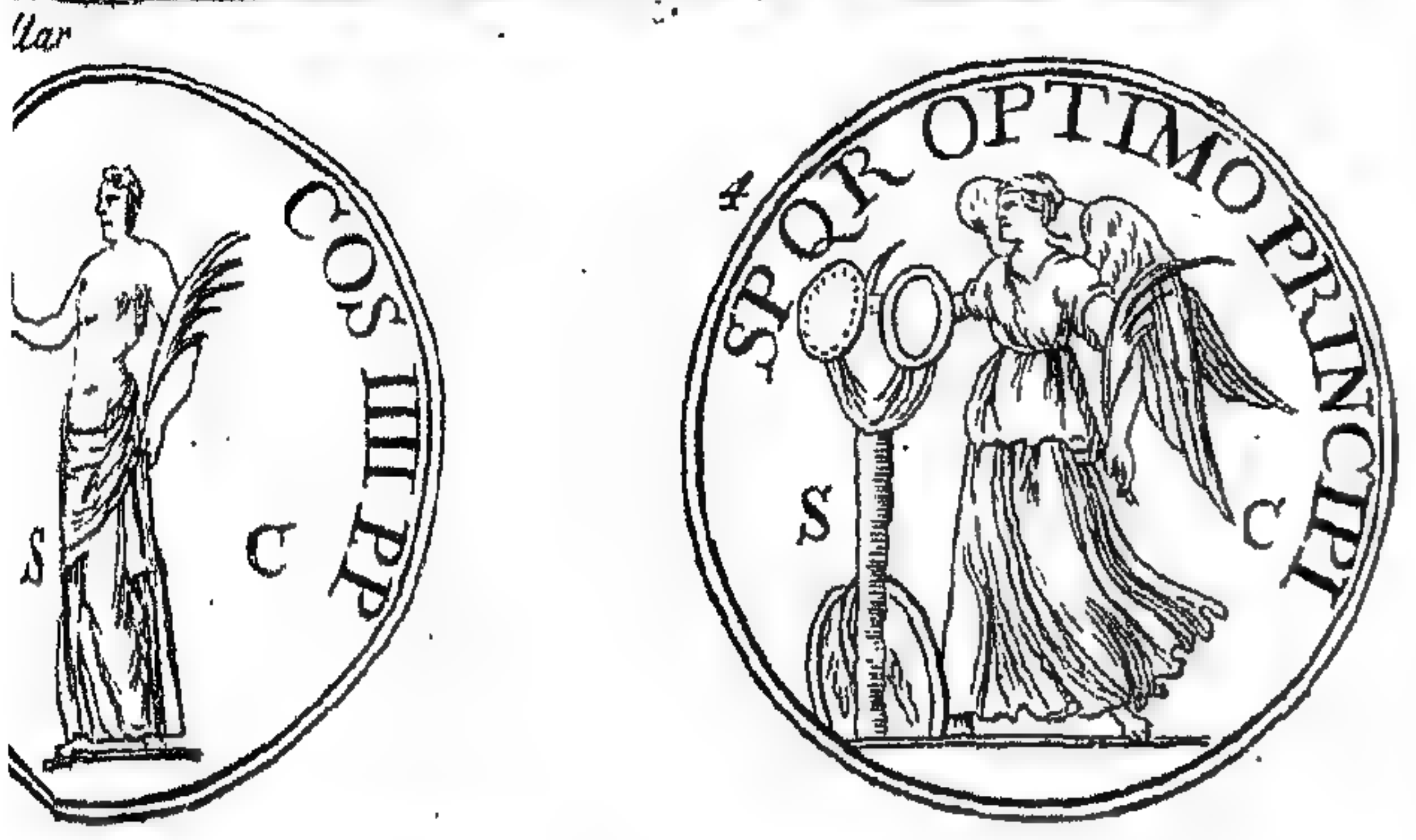
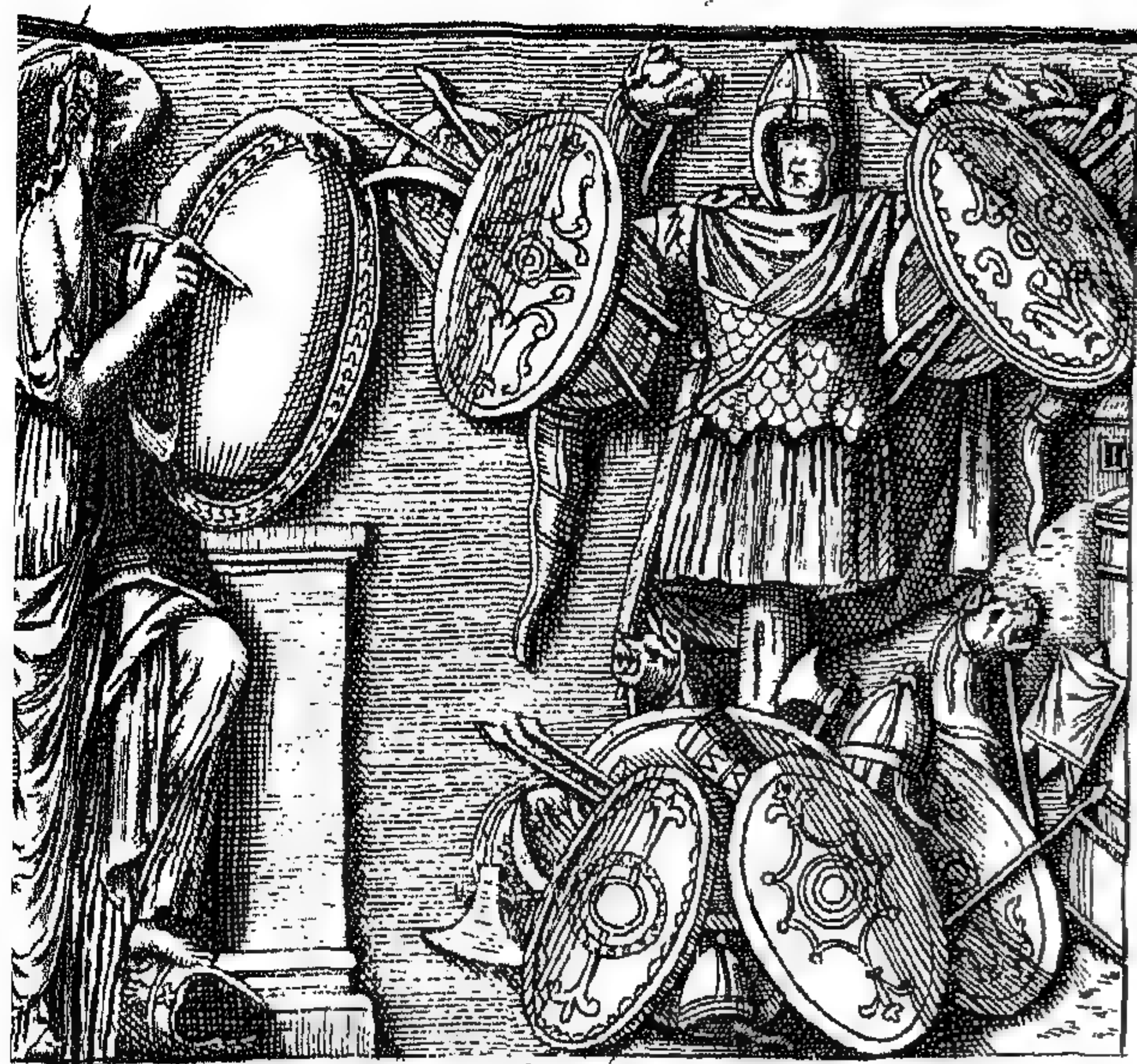
The fifth Condition was, that the first in Dignity should only triumph, that is to say, when there was a Consul in the Dictator's Army, the Dictator alone should triumph; the Reason of which was, least a lesser Power should seem to equal a greater, and the Auspices of the greater Magistrates be confounded with those of the lesser.

It was sixthly order'd, that a Triumph should be granted only to those who had enlarg'd the Dominion of the *Romans*, and not to such as had done no more than restore things that had been out of order; and therefore no Triumph was allow'd for the Conquest of Slaves, Pirates or Fugitives, nor for the quelling of civil Discords; in which last sort of War they did not so much as allow of Ovation or



Trajan's Pillar





or Sacrifice for Victory. For no *Roman* that had been conquer'd; could ever be led in Triumph.

The seventh Condition was, that he who sued for a Triumph, was to bring back the Army victorious, after having left the conquer'd Province to his Successor, and that in Peace.

In the eighth place, the whole Senate was obliged to assemble in the Temple of *Bellona* without the City, that they might hear from the Mouth of him who demanded the Triumph the several Particulars of the Victory, before they decreed him it, he being not allow'd to enter the City before he triumph'd.

Lastly, it was provided, that the Triumpher should be attended with Falces and Lictors crown'd with Laurel, until the Triumph was ended. The Triumph being decreed, he began his Entry into the City, went up to the Capitol, offer'd a Sacrifice, and after that made a Feast: Which done, he stript himself of all his Ensigns of Power and Command, and retir'd to his own House as a private Person.

IV. When the Tribunes of the People happen'd not to be in the Interest of him that desir'd a Triumph, as it sometimes fell out, they then rejected the Petition, and so deprived him of that Honour: Or if the Tribune, carrying his Petition to the People, had a Majority of Voices against him, that also hinder'd him from triumphing; as did likewise the Opposition of the Collegues of the Tribune, whenever that happen'd. Or again, which was worst of all, if the Tribune, instead of demanding the People's Consent to a Triumph, should cite him to give an Account of his Conduct, which sometimes was the Case when the Success of the War was none of the best. But if on the other hand a Triumph was granted him, it was then to be celebrated in this manner.

The General being habited in a purple *Prætexta* embroider'd with Gold, and adorn'd with Palms, presented himself to the People and Soldiers, and gave Presents to the Tribunes, Centurions and Soldiers, as a Reward of their Valour. After which he sacrific'd, and then mounted his triumphal Chariot, praying in these Words: *O ye Gods, by whose Help, and under whose auspicious Influence it is, that the Roman Republick exists and flourishes; I beseech you continue to be propitious to it, and preserve it.* The Chariot was all gilt, adorn'd with Jewels, and in form not unlike a round Tower: Sometimes indeed we meet with triumphal Chariots four-square; but that's but seldom. This Chariot run upon two Wheels, and shone exceeding bright with the Images of the Gods; but this Ornament is not always the same, as will be seen in the triumphal Chariots below. The Idol or Image of a *Phallus* was suspended under the Seat, where the Triumpher sat who drove the Horses himself. Upon his Head he wore a Crown of Gold set with Diamonds. Behind him, appointed for the Purpose, was a Man that supported his Crown, and admonish'd him to take Care of himself, and to watch over himself all the rest of his Life, that he did not grow proud. *Tertullian* says this Monitor express'd himself in these Words: *Look behind you, and remember you are but a Man.* This Crown was afterwards deposited in the Lap of *Jupiter Capitolinus*, or consecrated in other Temples, nor was it permitted to be laid up elsewhere.

Upon the Chariot there was hung a small Bell and a Scourge, Instruments made use of at capital Punishments, to put the Triumpher in mind of the Vicissitude of Fortune, and that it might yet happen, that he, after this bright Day of Triumph, might make his Exit under the Hands of an Executioner, if he did not live within the Bounds of his Duty. If he had young Children; or Grand-children of either Sex, they rode in the Chariot with him; but if they were grown up, they then rode on Horseback beside the Chariot. These triumphal Chariots were drawn for the most part by four Horses; but sometimes by

fix, as we see in *Severus's* Arch, and sometimes also by ten, as we may observe in an Image we shall give below. They were also sometimes drawn by other Animals: Thus *Pompey* triumph'd with Elephants, and others with Tigers, Stags and Dogs. The General pass'd in this Equipage through the triumphal Gate, and went up to the Capitol.

The Habit of him that triumph'd, was, as has been already said, a purple Robe, embroider'd and edged with Gold: His Crown was of Laurel intermixt with Wire and Leaves of Gold: In one Hand he held a Laurel-branch, and in the other an Ivory Sceptre, with a Bird's Head upon it in some Representations of it, perhaps an Eagle's: His Face he wash'd over with Vermilion, after the manner of the *Affyrians* and *Medes*.

In this Procession he was preceded by a great number of light-arm'd Soldiers, and those call'd *Rorarii*, who carried before him the Symbols of Mountains, Rivers, Towns and Cities brought under their Dominion. Next to these march'd the Waggons loaded with the Spoils and Arms of the Enemy, together with their military Ensigns laid down: Then the several military Engines, the Helmets, Cuirasses, Shields, Boots, Vases of Gold, Silver and Brass, and in short all the Gold and Silver, whether coin'd or in Bars, which they had taken from the Enemy. After these came up those Animals of the conquer'd Countries, and with them the Plants, the Species of which had been unknown at *Rome* until that time. After all these follow'd the Minstrels with their Flutes, crown'd for the Sacrifices, and singing, who were follow'd by white Oxen or Bulls adorn'd with Ribbands and Fillets, and their Horns gilt, design'd to be sacrific'd to *Jupiter*, and not unlike those at *Titus's* Triumph. On the right and left were the *Popæ* or *Victimarii*, girt, and carrying *Patera's* of Gold and Silver. The Tribunes came next, and with them the Centurions, Præfects, and the choicest of the Horse and Foot, who for their valiant Actions were crown'd with Laurel, and honour'd with Presents, which Presents they carried along with them in Pomp. Then follow'd the captive Kings, if there were any; and if not, the Nobles and great Men of the Nations they had subdued: These march'd half naked, with their Hands tied behind their Backs; and if they were dead, their Images supplied their Places. When the Captives had pass'd the *Forum*, they lead them to Prison, in order to be put to Death. That, however, was not always done, as we shall see in the Triumph of *Paulus Æmilius*. Crowns of Gold presented to the General by their Allies and Confederates, were here also brought upon Litters, the Bearers of which were crown'd with Garlands of Olives. These golden Crowns, which at first were given by Princes, Provinces and Cities voluntarily, and of their own Generosity, were afterwards exacted as a sort of Tribute, so that sometimes a Sum of Money was given in their stead, which upon that account was call'd *Aurum Coronarium*.

Asconius says the Image of *Hercules* was carried before him that triumph'd; but these things were without all doubt subject to various Changes. The next that came were the Minstrels that play'd upon the Guitar and Flute, in the midst of which was a Man habited in a long Robe that reach'd to the Ground, whose Business was to put himself into odd Gestures, and talk ridiculously. Round the triumphal Chariot were the Senators all habited in white.

Next to the Chariot came the Freedmen or Slaves set at Liberty, with their Heads shav'd. The victorious Legions march'd next, divided into *Plottons*, and wearing Crowns of Laurel: These shouted and huzza'd, crying out *Io triumphe Io*, and sung Verses in Honour of the Conqueror, celebrating his great Exploits. But as in these publick Rejoycings they do not always confine themselves within the Bounds of good Manners, so there were some on the other hand, who instead of joyning in the Praises of the Conqueror, gave their Tongues the Liberty to expose

expose his Vices, how gross soever they had been; and this, as far as we are able to judge from History, they did with Impunity.

The Streets through which the Cavalcade proceeded, were all hung with Tapestry, spread with Flowers and sweeten'd with Perfumes; and to clear the way through them, there were certain Officers appointed with gilded Staffs that separated the Mob. The Temples upon this Occasion that were in the way of the Procession, were all set open, and adorn'd with Garlands of Flowers; and the Perfumes burnt therein scatter'd their Odours through the whole Neighbourhood: Prayers also were offer'd up in them, accompanied with Sacrifices. As soon as the Triumpher arriv'd at the Capitol, he return'd his Thanks to the Gods in these Words: 'I give thee Thanks, *O Jupiter Optime Maxime*, and thee Queen *Juno*, 'and all you other Gods that dwell within this Place, and are the Guardians 'thereof; I give you hearty Thanks, I say, for that you have been propitious to 'this Republick, and made me the Minister of its Preservation: Continue still, I 'beseech you, your Favours and Protection.

This done, the Victims were slain, and the Crown of Gold above-mention'd, together with all the Spoils of Value, thrown into *Jupiter's* Lap, and consecrated to him. When all this was over, there was a sumptuous and magnificent Entertainment, to which the Consuls were invited; yet nevertheless were desired not to be there, if the Conqueror happen'd not to be one of that Dignity: and this they did, that no Body might be present that was more noble, and of superiour Quality than he. And here, least, in the midst of so great Pomp and Honour, the Triumpher should forget the Vicissitude of human Affairs, the Custom was to place a Slave beside him to speak to him now and then in such Terms as these: *Magis servo tuo pareo, quam tibi*; I rather serve your Slave, than you.

V. But besides the Honour and Pomp of a Triumph, which was the most splendid Solemnity of the *Roman* Commonwealth, and afterwards of the Empire, the Triumpher had also some permanent Honours conferr'd upon him, such as to take always the most honourable Places, and to assist at publick Spectacles in a Curule Chair crown'd with Laurel. Monuments also were erected, and those stately ones, to perpetuate the Memory of his Victories; as Trophies, for Instance, of which mention was made before we came to the Triumphs, because they were what often preceded them; triumphal Arches, Columns and Bass-Reliefs, of which hereafter.

C H A P. IV.

The Triumph of Paulus Æmilius, who conquered Macedon.

WHAT we have been describing, is the Order and Manner of the Triumphs, as they were commonly celebrated from the time the *Roman* Republick began to extend their Empire beyond *Italy*, and to subdue opulent and powerful foreign Nations: For before then their Triumphs were not near so magnificent. *Romulus* is generally thought to have been the first that triumph'd; tho' others will have it, that it was *Tarquinius Priscus*. But be that as it will, it does not much concern us. We shall therefore proceed to describe the Triumph of *Paulus Æmilius*, who conquer'd *Macedon*, as it is related by *Plutarch*; which is not only what exceeded in Magnificence any that *Rome* ever made, but is also the most particularly describ'd of any other.

The

The Soldiers of that great Man being provok'd at him, because he would not suffer them to plunder the Treasure of the King of *Macedon*, conspir'd with *Sergius Galba*, Tribune of the Army, *Paulus Æmilius's* Enemy, to disappoint him of the Honour of a Triumph, and therefore brought heavy Accusations against him to the People, which they manag'd so well, that the first Tribe which gave their Suffrages, excluded him from triumphing. Upon this, *Marcus Æmilius*, a Man of great Courage, and one who had been Consul, who had also kill'd with his own Hand in single Duels three and twenty of the Enemy which he had challeng'd to fight, not being able to bear the Indignity of the People in thus giving their Judgment at the Instigation of the Malecontent Soldiers, went up to the Tribunal, and there harangued the People with so much Strength and Eloquence in Favour of *Paulus*, that he brought them over all to decree him a Triumph: Which Triumph *Plutarch* thus relates.

' To see this grand Procession, the People erected Scaffolds in the *Circus*, the
' *Forum* and other Places through which it was to pass, and were all habited in
' white Garments. The Temples were also all set open, and fill'd with Crowns and
' Perfumes; and Serjeants and Lictors with Clubs appointed to clear the way and
' keep the People in some Order. The Solemnity lasted three Days; the first of
' which was scarce sufficient for the March of two hundred and fifty Waggons,
' loaded with Captives, Paintings and Statues. On the second Day were carried
' in Waggons the fine Arms of the *Macedonians*, both of Iron and Brass, which
' they took Care to furbish up and make as bright as could be: These at first
' sight appear'd to be thrown in on Heaps without Order and at random, which
' nevertheless were rang'd with the greatest Art and Symmetry. The Helmets
' were laid upon the Shields, and the Coats of Mail upon the *Ocreæ*: With these
' there were seen the *Cretan Peltæ*, and the little round Bucklers of *Thrace*, Qui-
' vers of Arrows mixt among Horses Bits, through which appear'd the Points of
' naked Swords, and here and there some *Sarissæ* or long *Macedonian* Spears.
' These Arms, tho' rang'd with so much Art, were nevertheless so loose, that
' the jolting of the Waggons made them clash and ring, and produce a kind of
' harsh Sound, which was purposely so order'd, that the very Spoils of conquer'd
' Nations might not be seen without some Terror. After these follow'd three
' thousand Men, with seven hundred and fifty Vases full of silver Money, each of
' which weigh'd three Talents, and was carried by four Men: Others carried silver
' Cups, Vases called Horns, Phials and Goblets; all which were remarkable for their
' Grandeur, Beauty and Boldness of the Sculpture. On the third Day early in the
' Morning the Trumpeters march'd at the Head of the Procession, sounding warlike
' Airs, such as they us'd in Battels, to inspire the Soldiers with Courage, and not
' such as were usually heard in their common Poms and Solemnities. Next to
' these follow'd a hundred and twenty Oxen with their Horns gilt, and deckt
' with Garlands for Victims, led by young Men with Girdles about them curiously
' wrought, prepar'd to slay them, who were also accompanied with little Boys
' carrying *Patera's*, some of Silver and some of Gold. Then follow'd the Sol-
' diers who carried the gold Money in seventy seven Vessels of three Talents
' Weight, in the same manner as the other did the silver Money. These again
' were follow'd by others who carried the consecrated *Phial*, made of Gold, and
' set with precious Stones by Order of *Æmilius*, the Weight of which was ten
' Talents. Then were expos'd to View the Cups of *Antigonius* and *Seleucus*, with
' those also of *Thericles*, and all the gold Plate that was us'd at *Perseus's* Table.
' Next to these came *Perseus's* Chariot, in which was his Armour, and upon that
' his Diadem. At a little Distance the King's Children were led Captives,
' and with them a Train of Nurses, Masters and Governors, who all wept, and
' stretch'd

‘ stretch’d out their Hands to the Spectators, teaching the little Infants also to beg
 ‘ and entreat their Compassion. These were two Sons and a Daughter, who by
 ‘ reason of their tender Age were altogether insensible of the greatness of their Mi-
 ‘ sery, which Insensibility of theirs administer’d occasion to more Compassion in
 ‘ the Spectators; nay they were so mov’d with Pity at the sight of these Infants,
 ‘ that *Perseus* himself was scarce regarded, and many of them even broke out in-
 ‘ to Tears, so that the Triumph was a Prospect both of Sorrow and Joy to the
 ‘ People, until the Children were gone past.

‘ After the Children and their Attendants came *Perseus* himself, habited in
 ‘ black, and wearing Slippers after the Fashion of his Country: He look’d like
 ‘ one astonish’d and depriv’d of Reason through the Weight of his Misfortunes. Next
 ‘ to him follow’d a great Company of his Friends and Familiars, whose Counte-
 ‘ nances were disfigur’d with Grief, and who by their Tears, and their continual
 ‘ looking upon *Perseus*, shew’d that it was his hard Fortune they so much lamented,
 ‘ and not their own Misery. *Perseus* sent to *Æmilius* to entreat that his Appear-
 ‘ ance might be dispens’d with, and that he might not be led in Triumph: But
 ‘ the Conqueror, deriding his Cowardise and Fondness of Life, sent him this
 ‘ Answer, *That it had been always in his Power, and was even so at that*
 ‘ *time to avoid that Ignominy*, giving him to understand that by a voluntary Death
 ‘ he might prevent it: But this the faint-hearted Prince had not Courage enough
 ‘ to do, being allur’d and entic’d by some vain Hopes, and therefore became
 ‘ himself a Part of the Spoils of his Kingdom. After these were carried four hun-
 ‘ dred Crowns of Gold, sent as Presents from the Cities by their respective Amba-
 ‘ sadors to *Æmilius*, as a Reward due to his Valour. Then came the Conqueror
 ‘ himself seated on a Chariot magnificently adorn’d, habited in a Garment of Pur-
 ‘ ple interwoven with Gold, and holding in his right Hand a Laurel-branch; a
 ‘ Person worthy to be beheld, even without these Ensigns of Power. All the Ar-
 ‘ my in like manner had Branches of Laurel in their Hands, and were divided in-
 ‘ to Bands and Companies, following the Chariot of their General; some singing
 ‘ Songs mix’d with Raillery, others Songs of Triumph, and the Praise of *Æmilius*’s
 ‘ Deeds, whose Glory and Happiness no good Man envy’d. It looks, however,
 ‘ as if it was the Province of some Deity to lessen that Happiness which is uncom-
 ‘ monly great, and so to mingle the Affairs of human Life, that no one should be
 ‘ entirely free from Calamity; but, as it is in *Homer*, that those should think
 ‘ themselves happy enough to whom Fortune had given an equal Portion of Good
 ‘ and Evil. This accordingly was *Æmilius*’s Case, who had four Sons, two of
 ‘ whom, namely *Scipio* and *Fabius*, were adopted into other Families, and the o-
 ‘ ther two, which he had by a second Wife, brought up in his own House, one
 ‘ of whom, who was fourteen Years of Age, died five Days before the Triumph,
 ‘ and the other of twelve Years old three Days after.

Plutarch adds, that *Paulus Æmilius* brought so much Gold and Silver from his
Macedonian Expedition, that no more Taxes were laid upon the People until the
 Consulship of *Hirtius* and *Pansa*.

Thus I have given you the Triumph of *Paulus Æmilius*; a Drawing of which
 was made by *Onuphrius Parvinius*, after *Plutarch*’s Relation: But tho’ he was an
 ingenious Man, yet we have not thought fit to give the Plate publish’d by him,
 most of the things there represented being only Conjecture, and sometimes even
 very different from what we learn from ancient Monuments. We might here ob-
 serve many Parts of this Triumph as delineated by him to be very erroneous,
 and disagreeing from the Monuments of the Ancients: But this would carry us
 beyond our Design: We shall therefore content our selves with giving those Ima-

ges of Triumphs which have been transmitted to us in Antique Monuments: We have none that represents an entire Triumph; but what remains informs us clearly of several Parts of those Triumphs.

C H A P. V.

I. The Triumph of the Emperor Titus, taken from the Antique. II. The Triumph of Marcus Aurelius. III. Other Triumphs; in one of which there is a Chariot with six Horses. IV. Other Triumphs.

I. **T**HE Triumph of *Titus* after the taking of *Jerusalem* is represented in his Arch, which we shall here exhibit as it was engrav'd at *Rome*, and in the same Order. In the first Plate the Emperor is making his triumphal Entry in a round Chariot call'd *Thense*, drawn by four Horses¹. A *Victory* puts a Crown of Laurel upon his Head: In one Hand he holds a Truncheon, and in the other a kind of Scroll. The City of *Rome* arm'd with a Helmet and a Spear, and habited as we have seen in the first Volume, holds one of the Horses by the Bridle. His Imperial Majesty is surrounded with Lictors and Soldiers, all crown'd with Laurel.

PLATE
XXXII.

² In the second Image² some Soldiers with Tunicks on, and crown'd with Laurel, carry the golden Table which was in the Temple of *Jerusalem*, and two Trumpets which had been for the Use of that Temple. Those that follow, carry the great golden Candlestick with seven Branches. All the Bearers have Sticks to support themselves with. Some others carry Branches of Laurel; others great Tablets, upon which were written, as is thought, the Names of the conquer'd Cities.

PLATE
XXXIII.

¹ In the second Plate we see the River *Jordan*¹ carried in Triumph, represented by an old Man lying down and leaning upon an Urn turn'd upside down, as is the manner of representing Rivers. We see here Bulls² led to the Sacrifice, with a sort of broad Bands hanging over their Backs fring'd at the bottom; and two *Popæ* or *Victimarii* carrying Baskets of Fruit. Here are also Senators in their Robes.

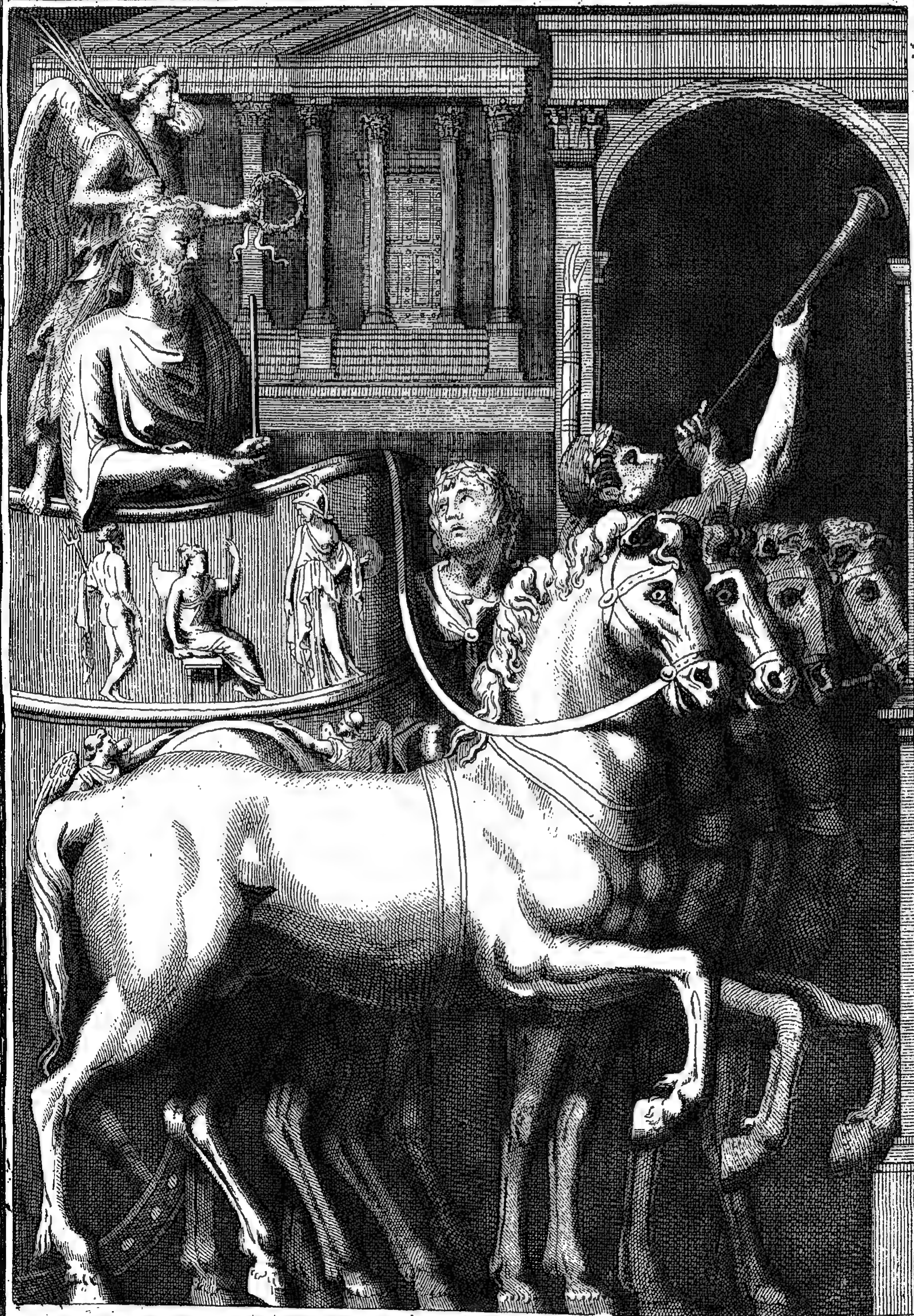
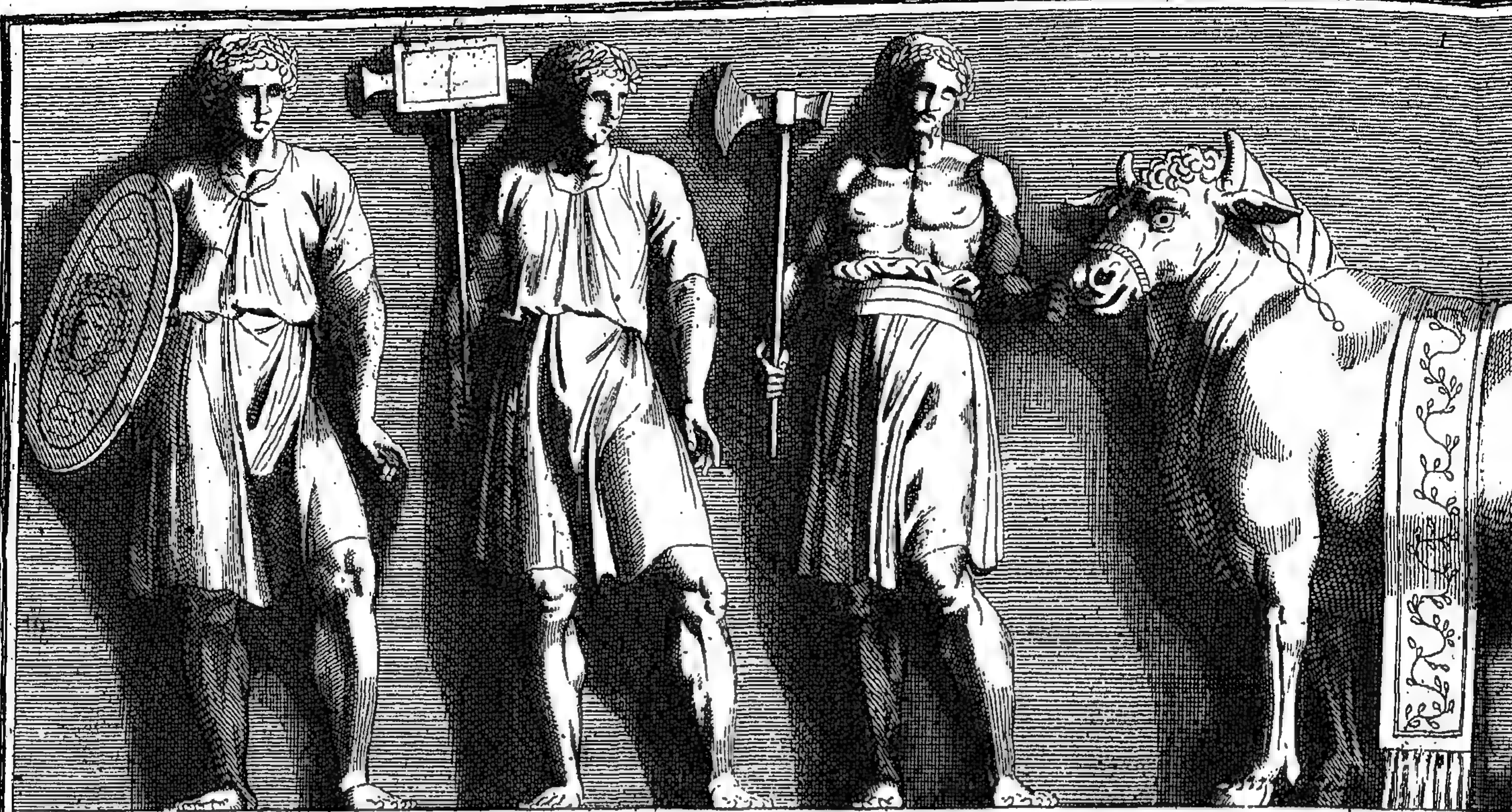
PLATE
XXXIV.

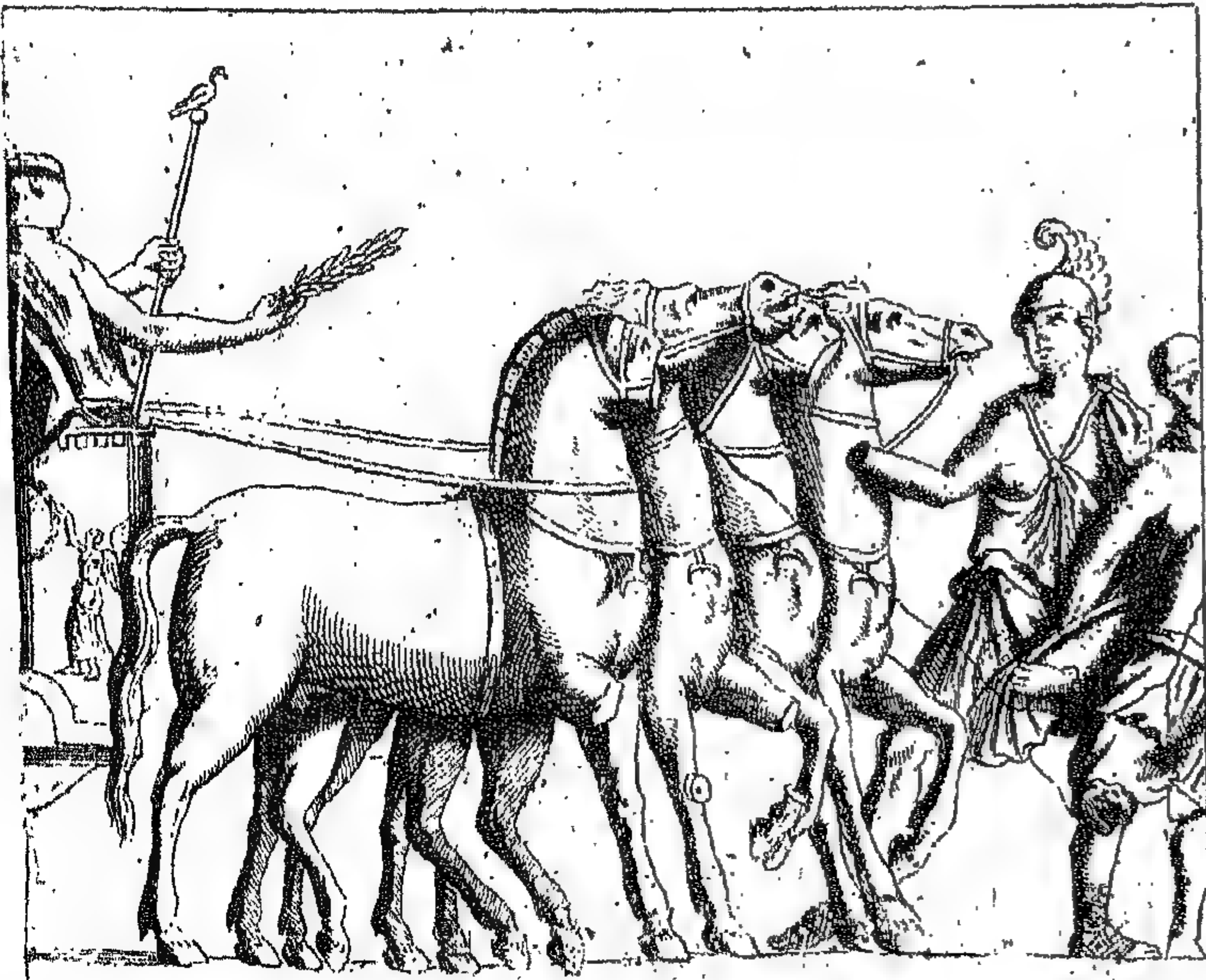
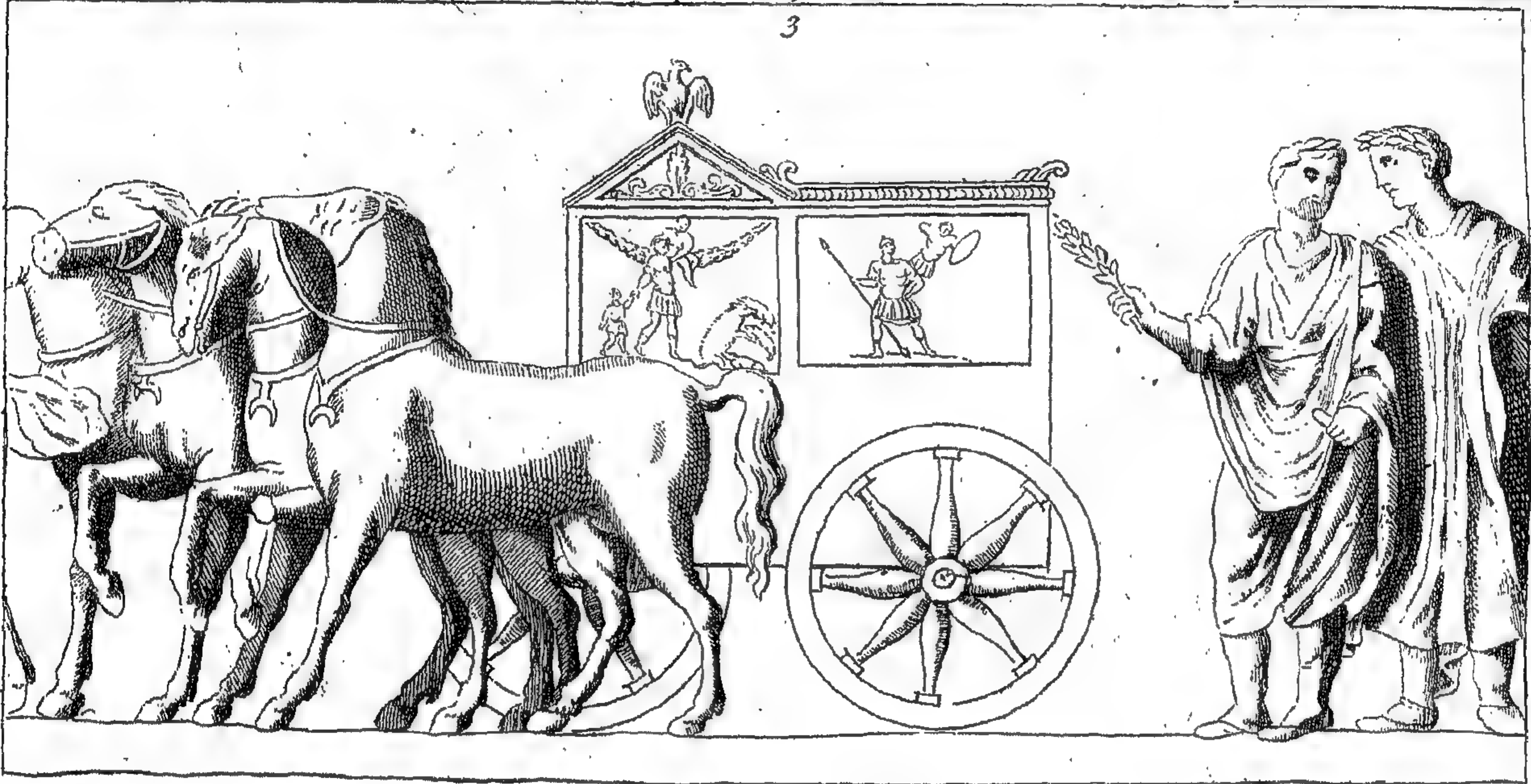
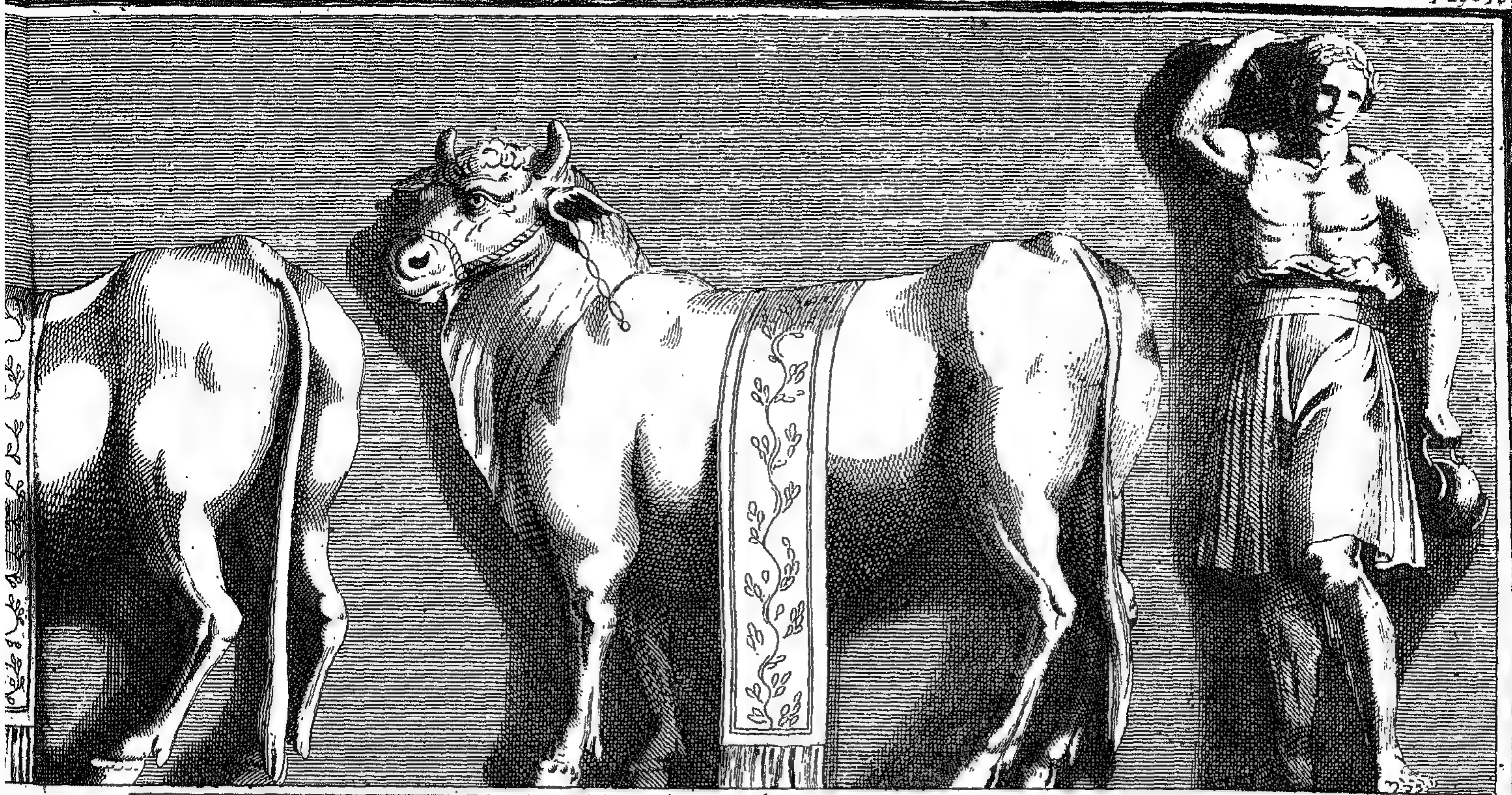
¹ In the third Plate there are Bulls adorn'd for Sacrifice¹, Soldiers arm'd with oval Shields. People with Tablets as above, a Man habited in a *Toga*, and other things, which we leave to the Reader's Observation.

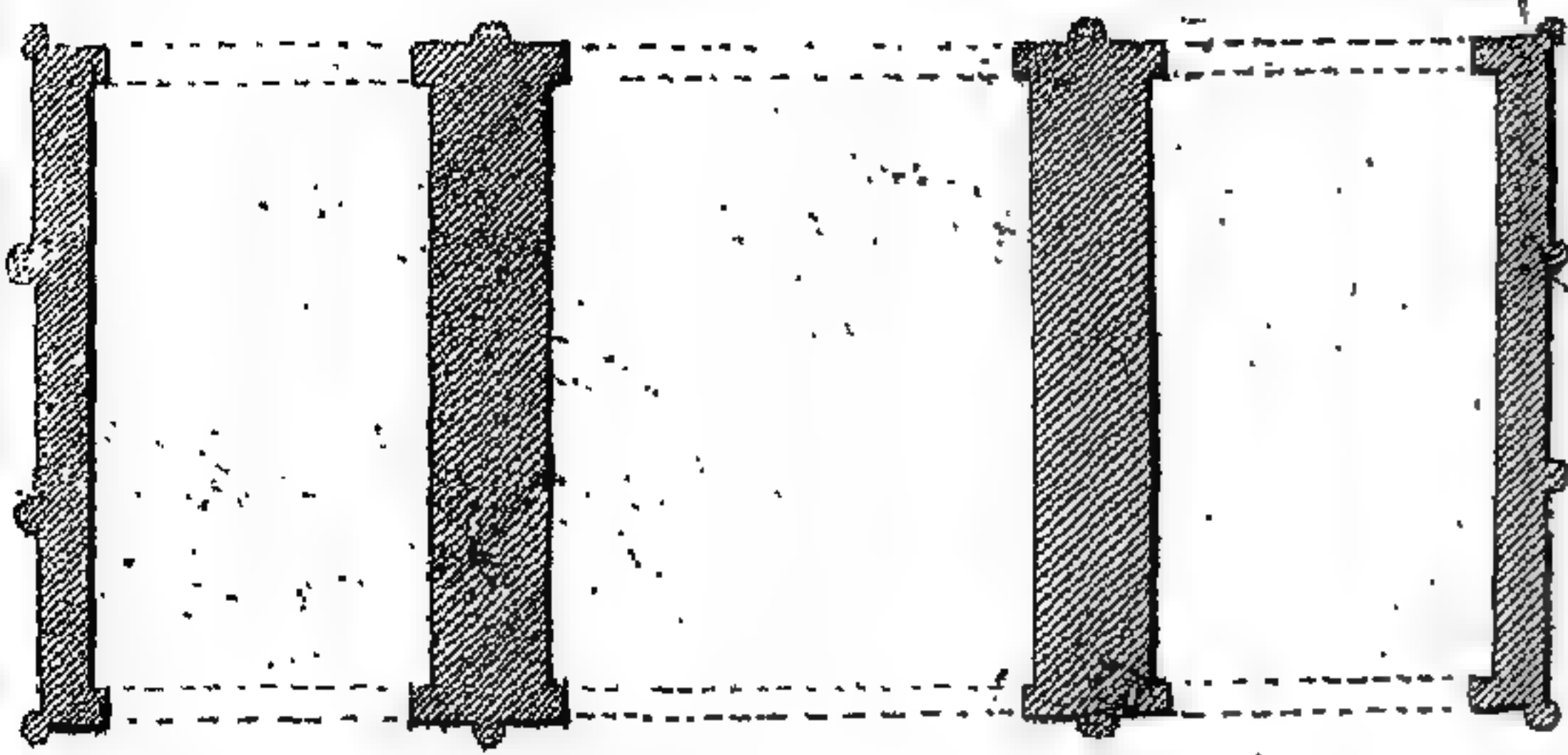
² II. The next Image² gives us the Triumph of *Marcus Aurelius*. The Emperor there sits in a Chariot drawn by four Horses: A winged *Victory* puts a Crown of Laurel upon his Head, and holds a Palm-branch in the other Hand. Upon the outside of the Chariot several Deities are represented: *Juno* is sitting in a great Chair, having *Neptune* with his Trident on one side of her, and *Minerva* on the other. This was the usual way of adorning triumphal Chariots.

³ III. Another Image represents a Triumph³ taken from a Bass-Relief in the Duke of *Alcala's* Garden at *Seville*: This Bass-Relief, with many other very considerable ones, which we shall give in the Course of this Work, were carried thither from *Rome*. The four Horses, which have been very much injur'd by Time, have each of them a half Moon upon his Breast, a very common Ornament, as we have often seen already. The triumphal Chariot is square, and the Front adorn'd with a Pediment, on which is an Eagle: Under the Pediment is represented *Aeneas* carrying his Father *Anchises* upon his Back, and holding young *Ascanius*

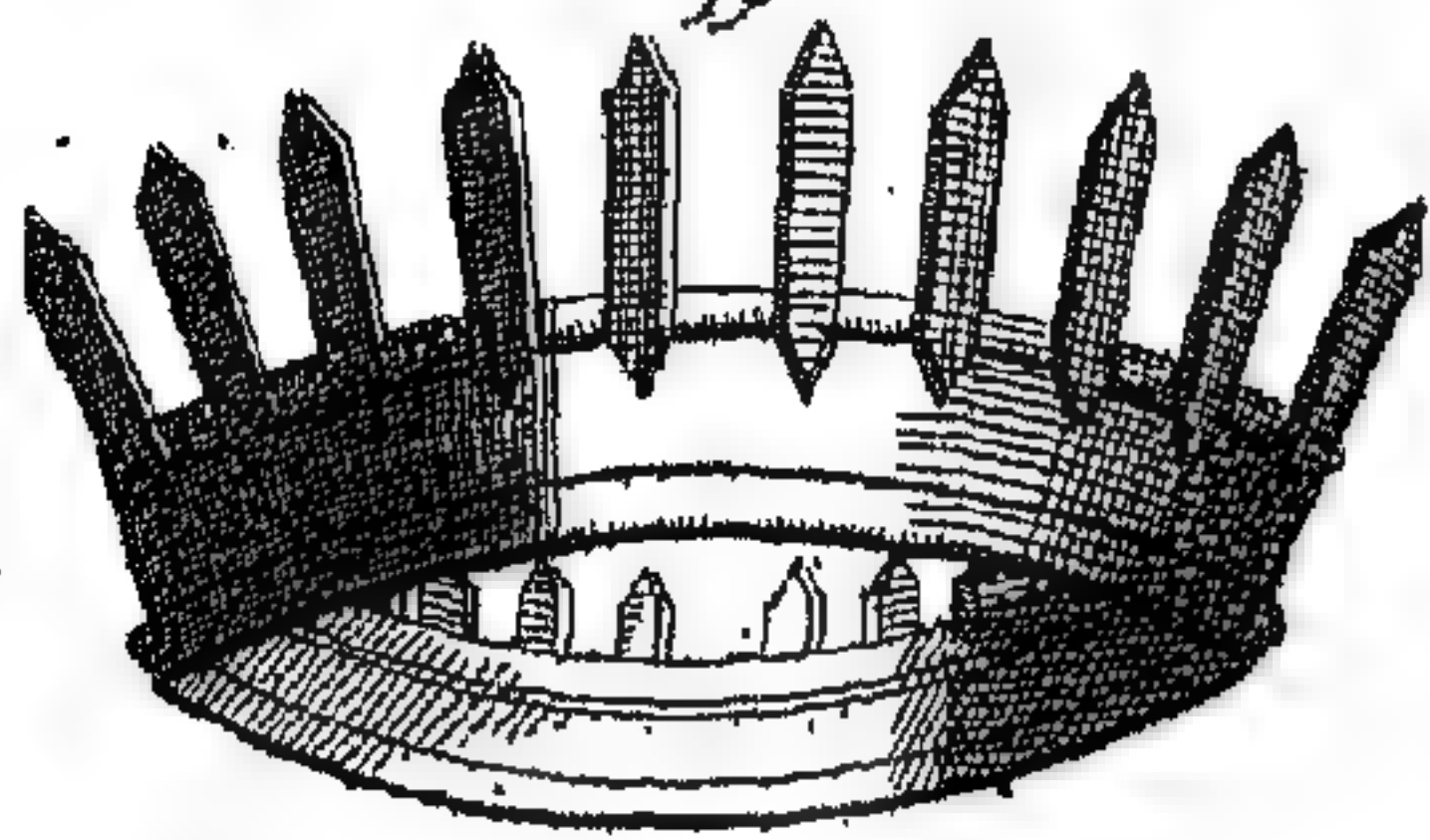
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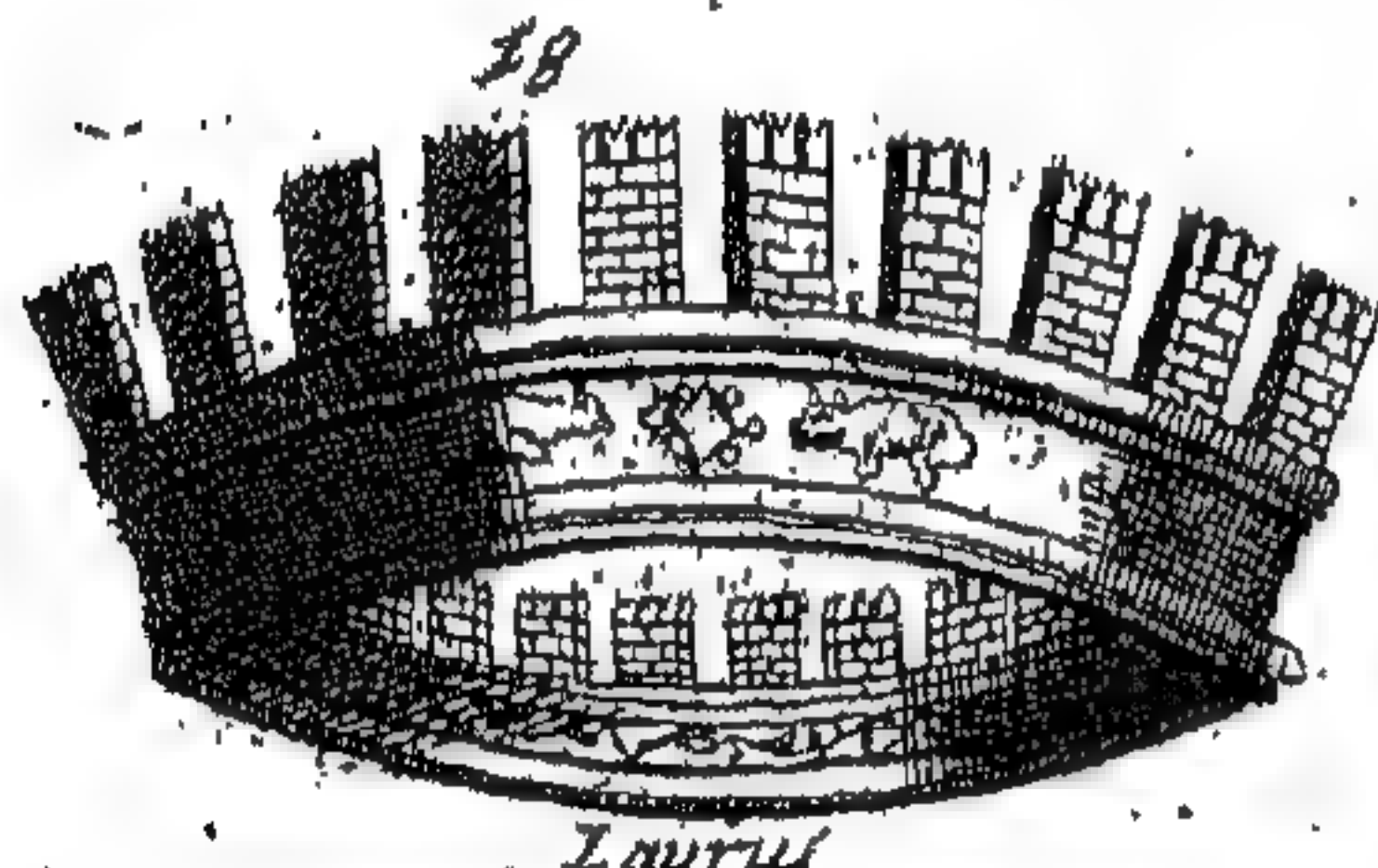
CORONA VALLARIS



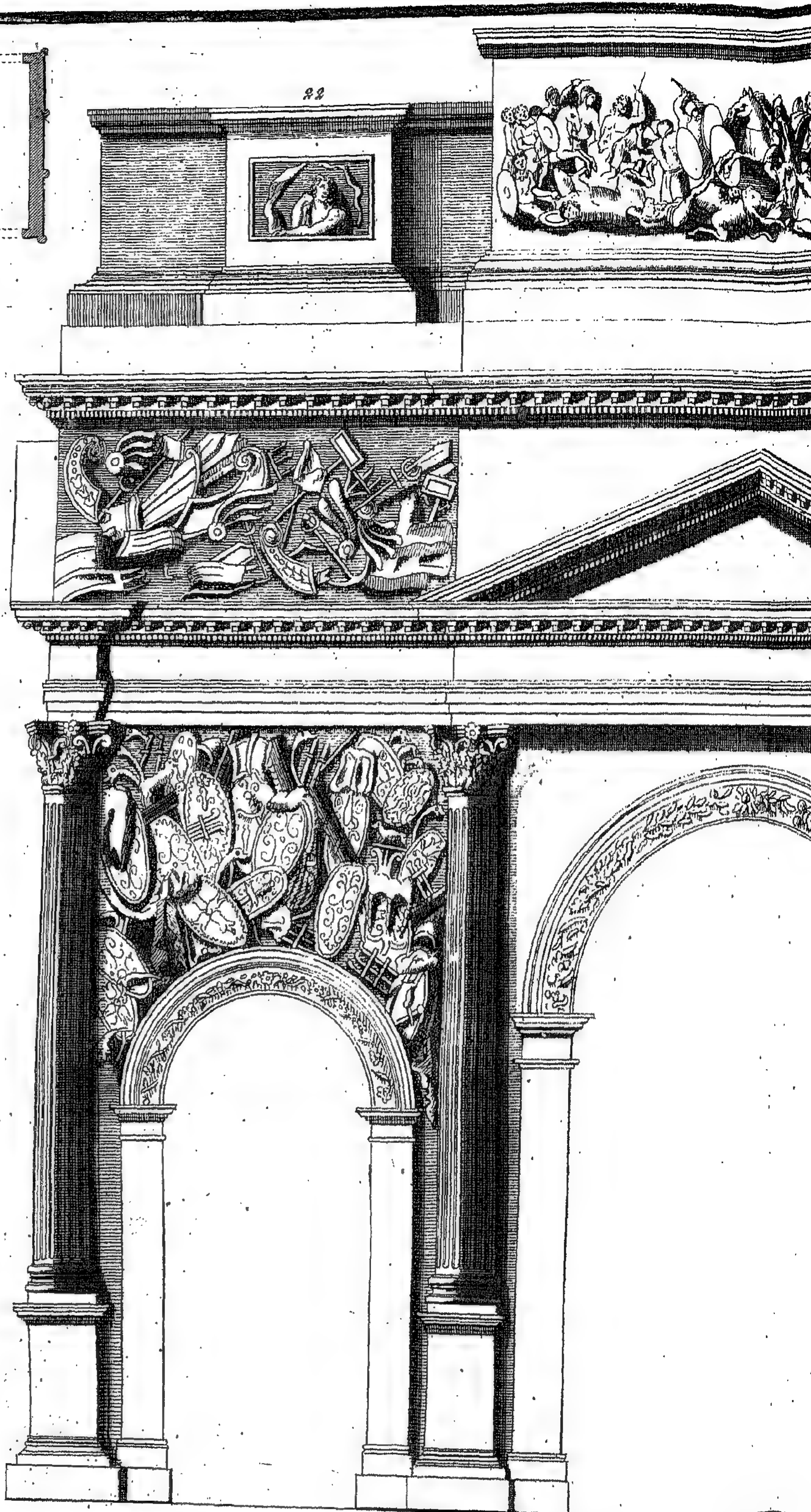
CORONA CIVICA



CORONA MURALIS



S. Genesio



M. Mignard



Bartoli



Bartoli



Bartoli



Bartoli



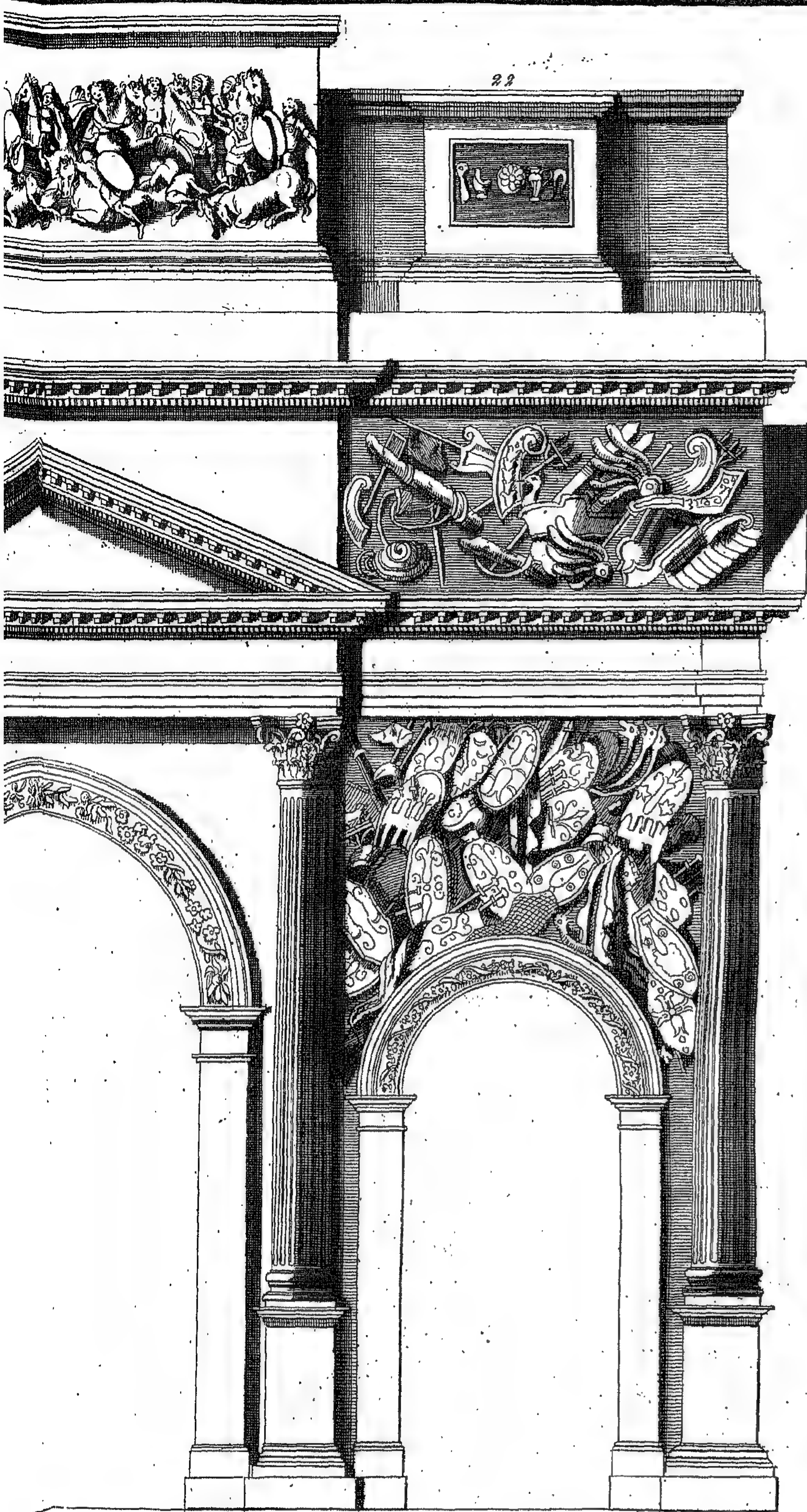
Bartoli



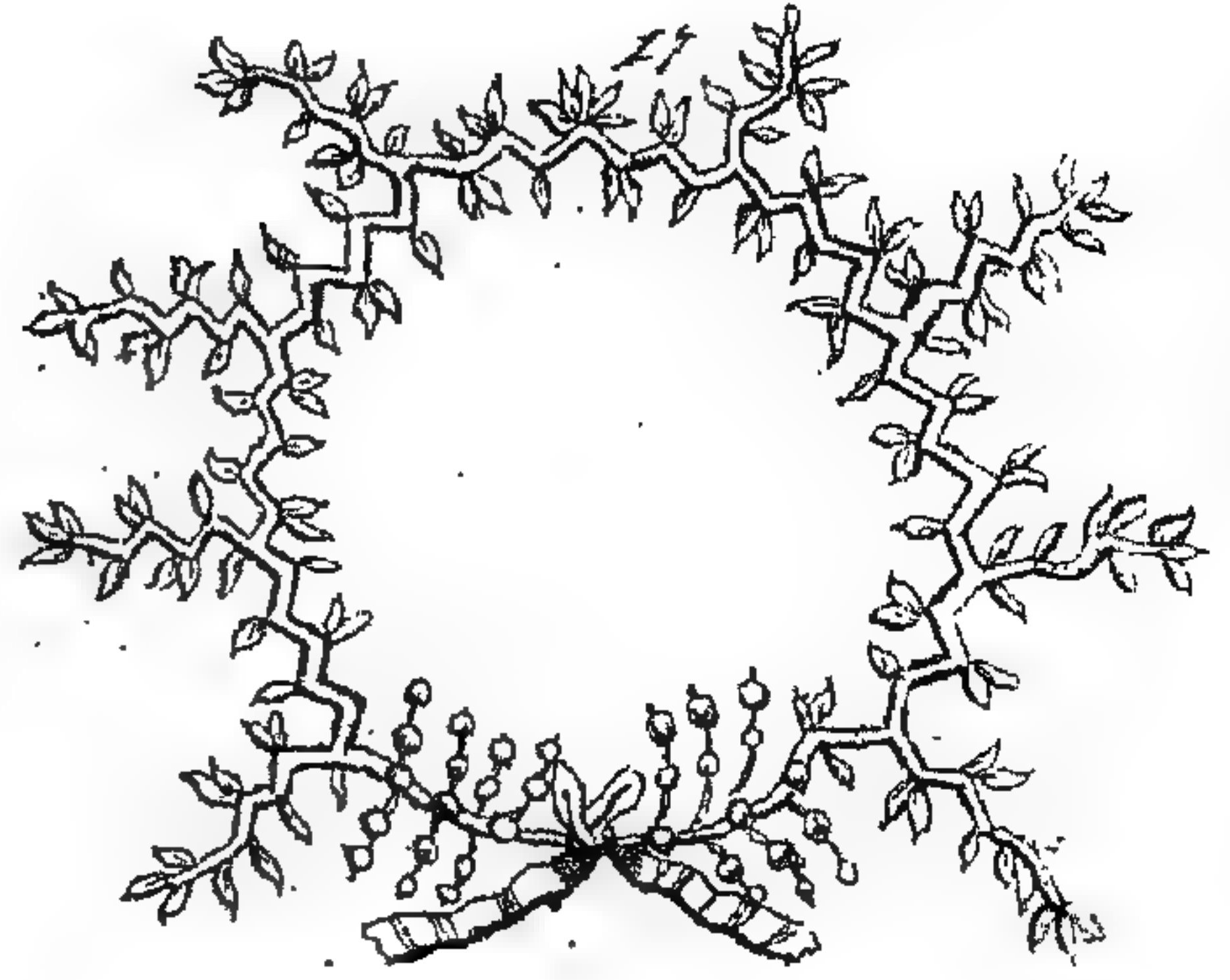
Bartoli



Bartoli



CORONA GRAMINEA



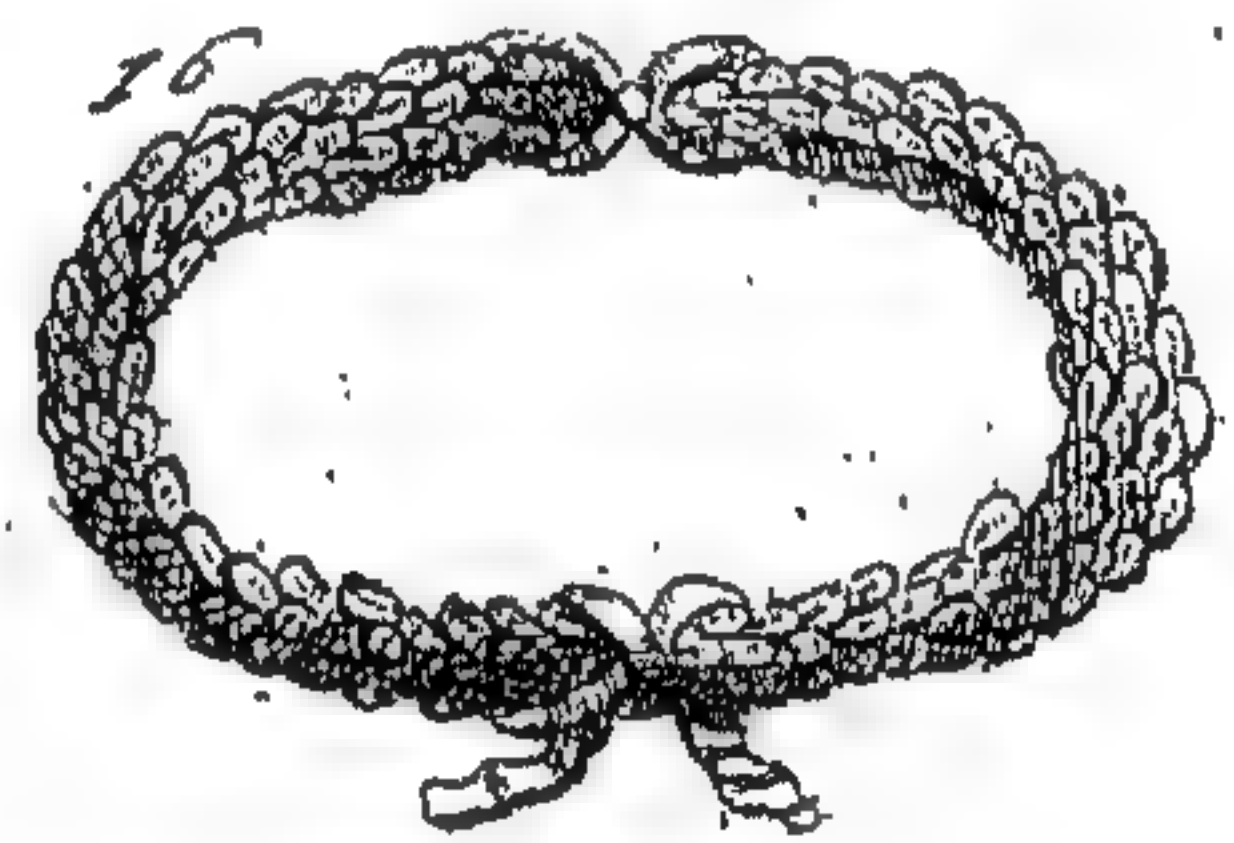
CORONA LAUREA



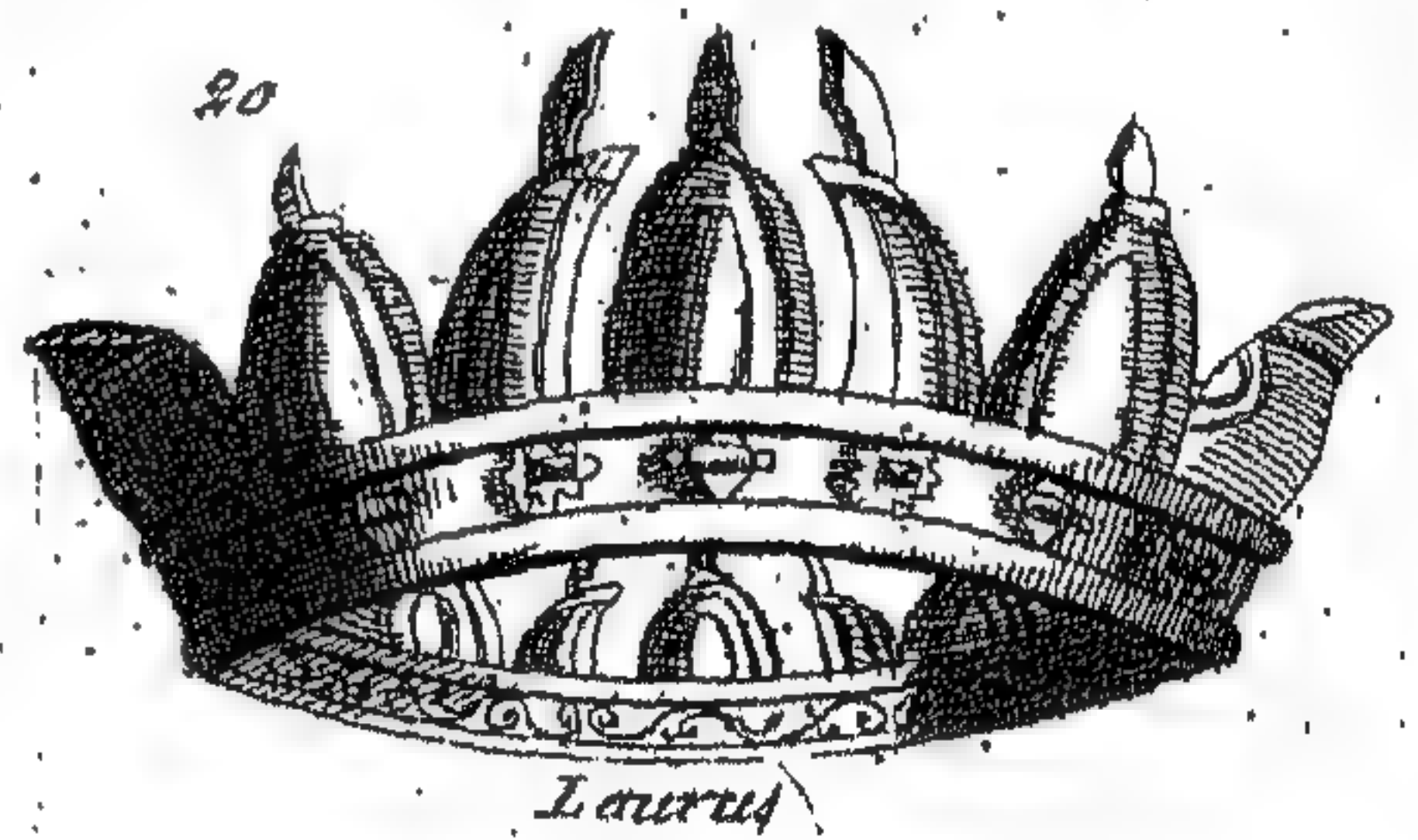
CORONA TRIUMPHALIS



CORONA MYRTEA OVALLIS



CORONA NAVALIS ROSTRATA



nus in his Hand. On the other side of the Chariot is represented a Soldier holding a Trophy and a Pike. The Triumpher, who is crown'd, and holds a Branch of Laurel in one Hand, and a Scroll in the other, is not mounted upon the Chariot. Another who accompanies him, is crown'd with Laurel like himself. I know not how the following Image ⁴ came to be put here: It is a Conqueror at the *Circensian* Games, to whom two *Genii* bring a *Pileus*, a Symbol of the Liberty he has got by his Victory. This Image has been already represented in the *Circensian* Games; but from a much more accurate Design taken by M. *Fabretti*. What we have here was publish'd by *Spon*, who was not altogether so accurate.

The next Medal ⁵ represents the *Sejuges* or Chariot with six Horses, which is quite round. The Triumpher, who is, as usual, crown'd by a *Victory*, holds a Branch of Laurel, and the Horses have a Palm-branch upon their Heads. In the following Image *Hector* is dragg'd behind *Achilles's* Chariot ⁶, *Hecuba* upon the Walls of *Troy* is lamenting the Death of her Son, and the ill Usage of his Body. A Woman sitting upon a Globe with a mural Crown upon her Head, represents the City of *Troy* mourning at the Disaster of her Defender.

IV. The next Image exhibits likewise a Triumph ⁷. The City of *Rome* held the Horse's Bridle, as in *Titus's* Triumph, but her Arm is now broken off. The Horses have half Moons upon their Breasts here, as well as in preceding Triumphs: The triumphal Chariot is quite round, and adorn'd with Figures. The Triumpher, whose Face is quite disfigur'd thro' the Injury of Time, holds a Branch of Laurel in one Hand, and in the other a kind of Sceptre with a Bird upon it, which might be an Eagle, tho' it looks very little like one, Time having in all Probability defac'd it.

The Triumph that follows is exactly like this ⁸. The *Victory* upon a Chariot with two Horses, holding a Crown and a Palm-branch, seems to belong to the *Circensian* Games. The Chariot is of the same Shape with those us'd in the publick Races.

The next Plate begins with two Triumphs, in both which ¹, by the Horses Heads, PLATE XXXV. is a great Trophy with Captives: One of the Triumphers is crown'd by a *Victory*: ² The Chariot of the other is preceded by a Soldier carrying a Trophy. All the following Medals exhibit *Victories* ³. One of 'em represents a Woman sitting by a Palm-tree, deploring her Misfortune ⁴: Behind the Palm-tree is a Soldier with his Foot upon a Helmet, the Inscription of which is *Judea Capta*. This signifies sometimes the Victory of *Titus*, and sometimes that of *Vespasian*, who subdued *Judea*. In another ⁵ a Man with a *Tiara* on his Head is prostrate on the Ground. In others again we see a Horseman throwing down a Foot-Soldier ⁶; an Emperor crown'd by a *Victory* ⁷, with four Eagles and four Standards at his Feet; a *River* sitting ⁸; a *Victory* crowning an Emperor ⁹; a Woman holding a *Cornucopia* and a Branch ^{10, 11}, and treading a Man under her Feet; a *Parthian* upon his Knees before a Woman ¹²; a Soldier sitting upon a Cuirass ¹³, and holding a *Victory* in his right Hand; a Soldier crowning an Emperor ¹⁴, and a *Victory* holding a Crown and a Palm-branch ¹⁵.



CHAP. VI.

The Triumph for a Naval Victory. II. What the Ovation was. III. The Ceremonies of the Ovation.

I. **T**HE Triumph for a Naval Victory, according to *Scheffer*, was celebrated in this manner. The Conqueror first sent to *Rome* a Ship crown'd with Laurel, and after that other Vessels loaded with the Spoils of the Enemy's Fleet, and crown'd like the former, in the largest of which he came himself, whether it happen'd to be a *Roman* Vessel, or a Prize Ship. At his coming the *Romans* met him; of whom, as soon as he had set Foot on Shore, he demanded a Triumph. If his Request was granted, the Triumph was perform'd in this manner. Some of the *Lictors* preceded; others follow'd, accompanied with Minstrels singing the Songs us'd at Sea. Next to these follow'd the Men that bore the Tablets, such as we have seen in the Triumph of *Titus*, wherein the Names of the Seas and Rivers were written where the Battle was fought. Then were brought the Arms and Naval Spoils, and especially the Prows plac'd upon Waggon, together with the *Aplustria* and other Ship Ornaments: Tablets also were carried, with the Names of the Vessels written in them, that had been taken from the Enemy; and next to them the Money taken from the Enemy, and the Crowns given by their Allies. After these came the captive Marines, the Captains of the Vessels, and the Admirals of the Squadrons that had been taken. After all this came the Conqueror, habited in a *Toga picta*, and wearing a Crown; but whether it was of Laurel or of any other thing, I know not; tho' it seems very probable it was Laurel, because the Sailors and Commanders were all crown'd with it. In this Order the Cavalcade march'd through the Streets of *Rome* until it arriv'd at the Capitol, where the Triumpher sacrific'd, and consecrated to the Gods some part of the Spoils, which they hung up in the Temples. Other Monuments of Victory they also erected, as Columns and Trophies, of which we shall take notice hereafter, when we come to speak of *Duillius's* Column.

II. The Ovation of the Ancients was a kind of lesser Triumph, and was so call'd from the Sheep (*ovis*) that was sacrific'd at it, whereas at the great Triumph it was the Custom to sacrifice a Bull. There's no Necessity to repeat here what has been before observ'd, namely, that when we are speaking of Sacrifices, *Ovis* is often taken to signify a Ram, and *Bos* a Bull. We have already seen what the Laws and Conditions of Triumphs were; any one of which being wanting, the Conqueror was then allow'd no more than an Ovation; as for Instance, when War had not been declar'd in form, or when the Enemy had not been evidently defeated, or else was somewhat contemptible, as being either Slaves, Fugitives, Pirates or Robbers; when the Enemy surrender'd without engaging thro' the Address and Management of the Commander; when they were overcome, without being totally defeated; when the Conqueror had won the Battle in another's Province, and not in his own; when there remain'd some of the Enemy's Troops in Arms, and the Province was not in full Peace; and lastly, when the General had not brought back the Army, or not deliver'd it up to his Successor.

III. He who had no more than an Ovation granted him, was not crown'd with Laurel, but Myrtle: The Senate, however, and all the several Orders of Magistrates went to meet him. There was also carried in this lesser, as well as in the greater Triumph, the Symbols of all the conquer'd Cities, the military Ensigns, the Spoils, Arms and Presents made by the several Cities to the Conqueror. The Sol-

Soldiers likewise carried publickly the Presents made them by their General: After all which came the General himself on Horseback in purple Robes, with a Crown of Myrtle on his Head, and a Sceptre in his Hand. It was the way at first in Ouations for the Conqueror to go on Foot, but the Custom of riding on Horseback was afterwards introduc'd. The People and Cavalry preceded the Conqueror in the Procession, and the Senate follow'd, which Custom was also introduc'd in After-times, it being the way before for the General to march alone. Instead of Bulls, the Victims us'd in the greater Triumphs, they had Sheep in their Ouations, or rather Rams crown'd, which were led before the Conqueror, in order to be sacrific'd when the Procession was over. They had also their *Tibicines* or Players upon the Flute, instead of Trumpets, which were the Musick of the greater Triumphs.

C H A P. VII.

I. Crowns, and their Origin. II. The Crowns of the Emperors. III. Several sorts of Crowns given as Marks of Honour. IV. Other Crowns.

I. **W**E come now to treat of the Crowns of the Ancients, and that not only of such as were worn by Conquerors in Triumphs, but of all others also of what sort soever, concerning which *Paschalius* and others have writ whole Books. And first as to the Origin of these, it is attended with as much Obscurity as that of any other thing; some making *Janus* the Inventor of them, and others *Bacchus*. But whether it was either of these, or any other that first invented them, we shall not stay to enquire; but proceed to the Description of the several sorts of them. Among these, there were Crowns peculiar to Kings and Princes, of which Notice has been taken in the third Part of this Work.

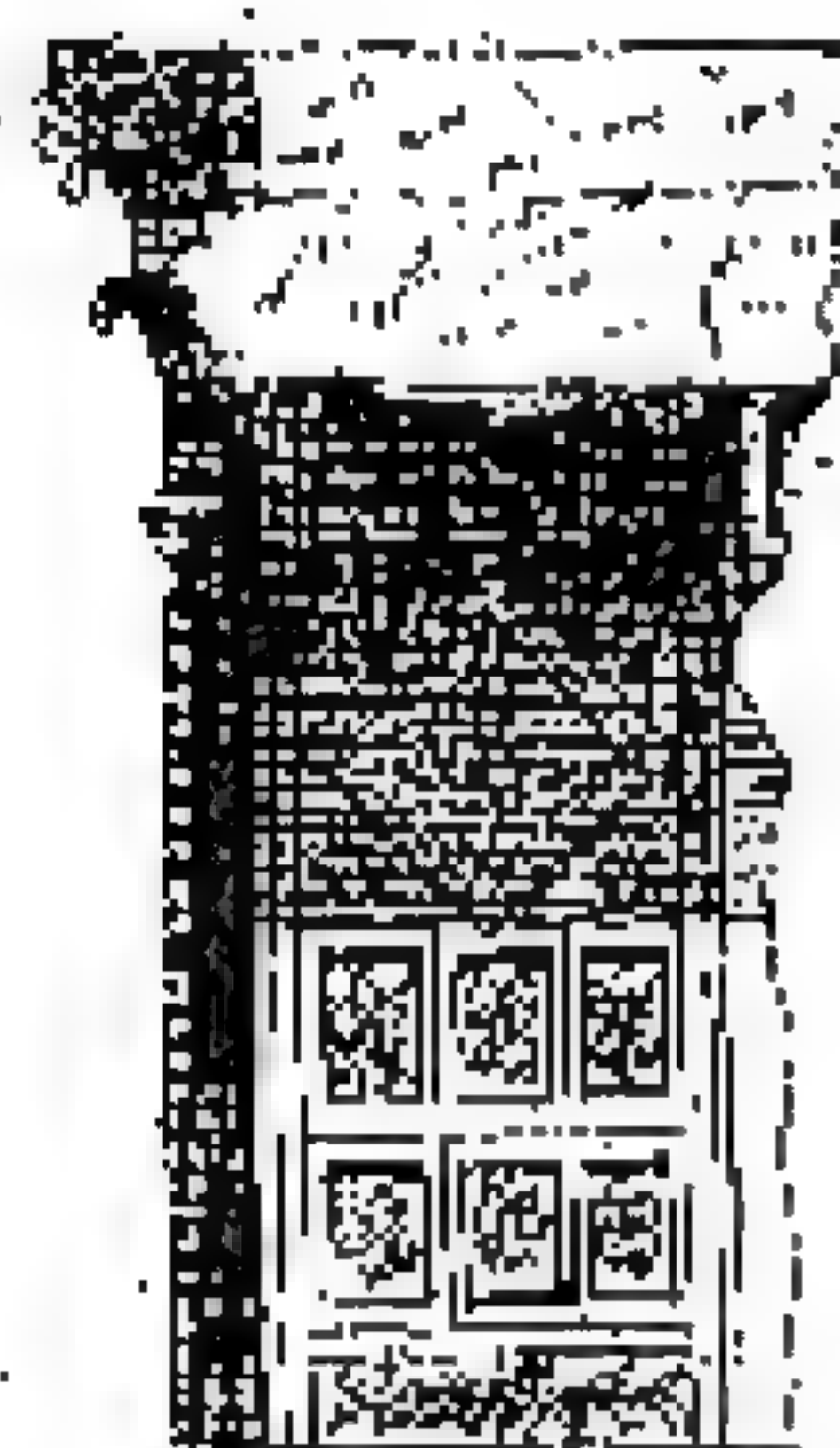
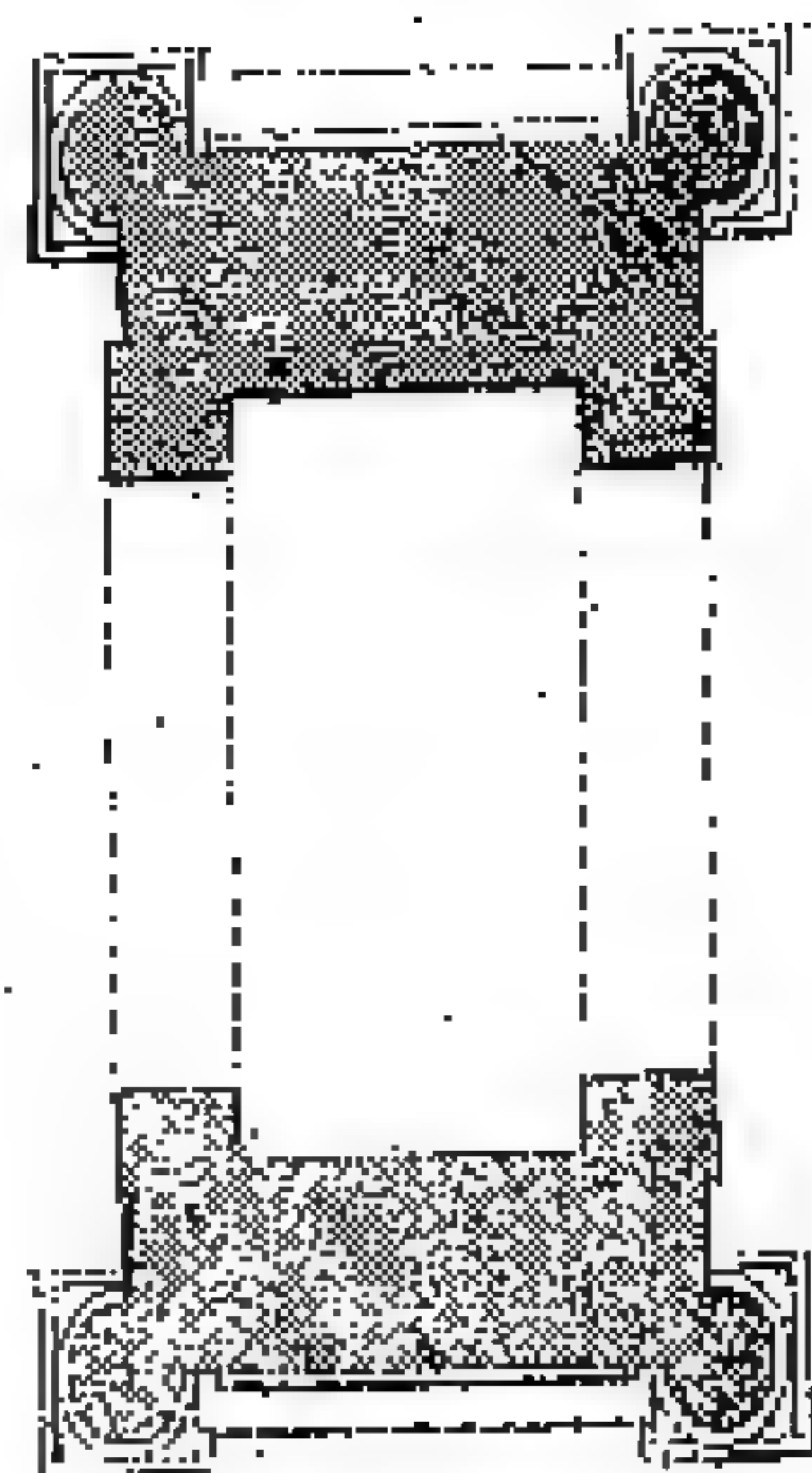
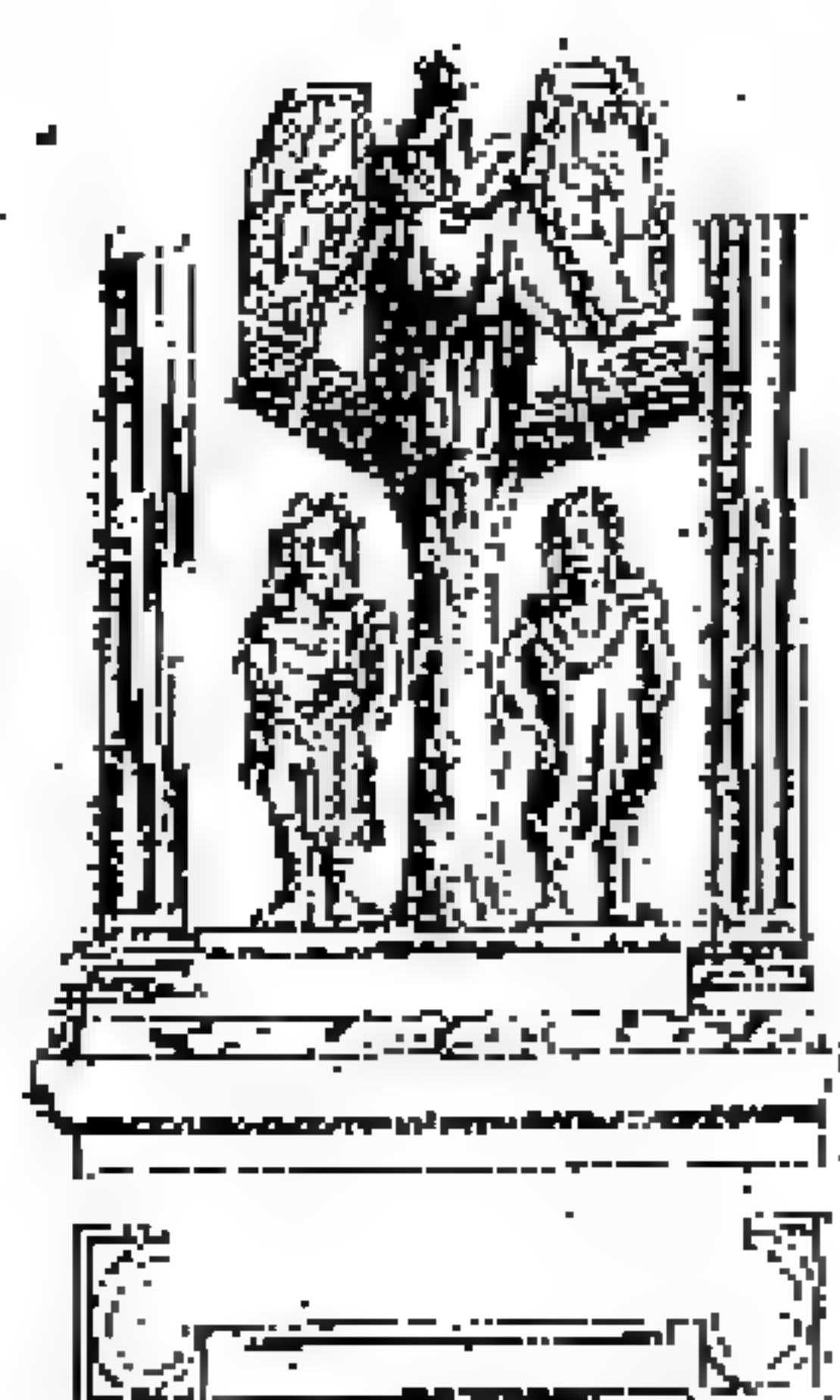
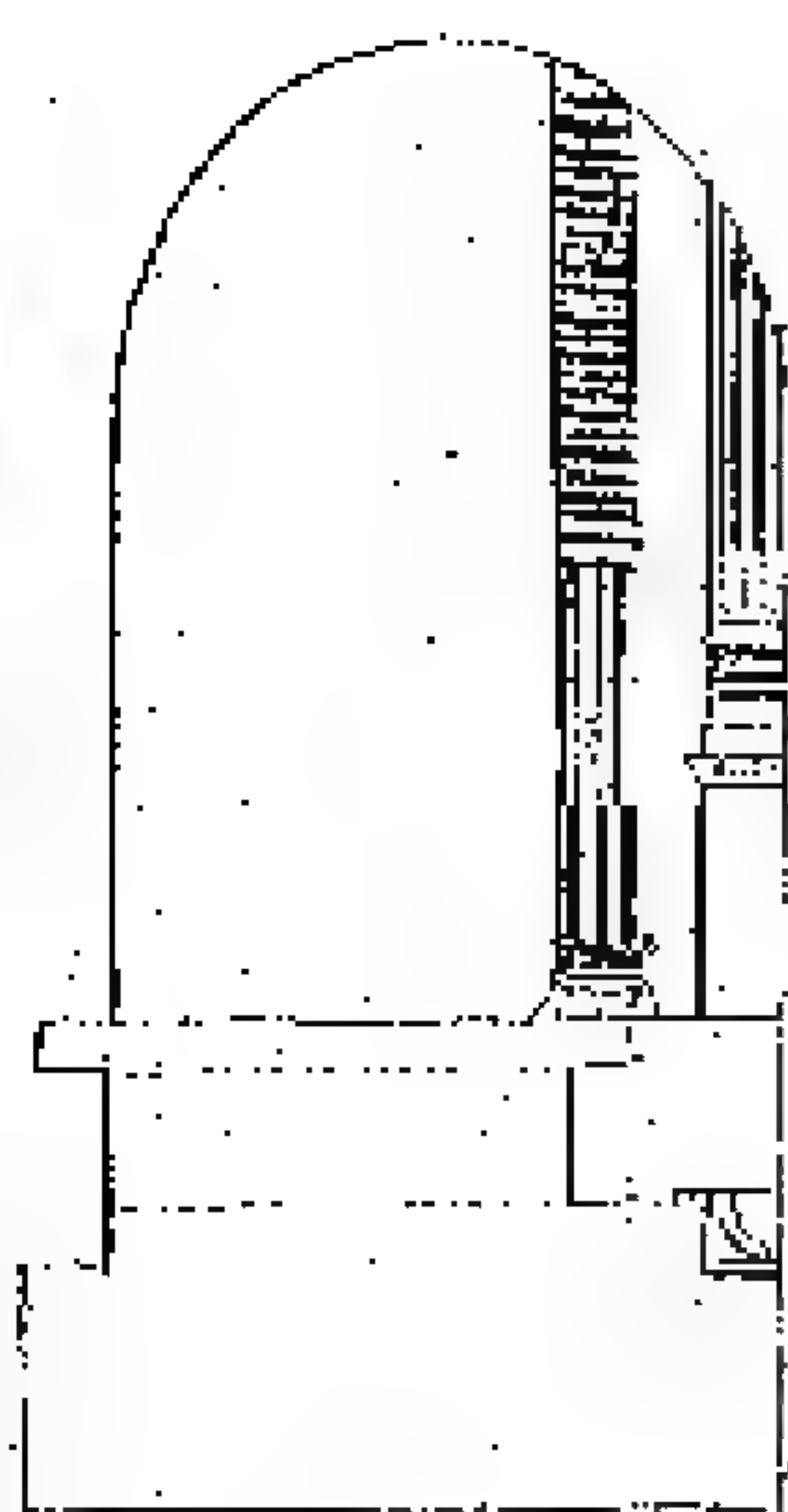
II. The Crowns of Emperors were in the Beginning made of Laurel¹⁴; after which they wore radiated Crowns, that is to say, a sort of Crowns adorn'd with Points that resembled Rays; and in After-ages golden Crowns of a circular Form, all enrich'd with precious Stones; but at last the Emperors of *Constantinople* wore the round Crown close on all sides, such as we see in the Images of Emperors of all the lower Ages. In *Constantine's* Arch, and among the Bas-Reliefs of *Trajan*, we meet with the last Emperor wearing a singular sort of Crown, that is a luminous Circle, the Rays of which seem to issue out of his Head, after the manner of what we call the *Glory*, us'd in the Images of Saints, so frequently seen in *Romish* Churches. 'Tis therefore probable that those flat and luminous Crowns were in use in the Times of Paganism, and from thence pass'd among Christians, who, as has been before observ'd, borrow'd several *rational* Customs from the Heathens.

III. *Athenæus*, in his fifteenth Book, takes notice of many other Crowns, but which seem to have been of very little Use: We shall therefore proceed to the Crowns worn as Marks of Honour on account of any brave Actions, whether in War or Peace. The triumphal Crown, as we have already seen, was made of Laurel¹⁵, and intermix'd with Threads and Leaves of Gold. Gold Crowns were also given to such as had obtain'd any considerable Victory, such as, according to *Livy*, were bestow'd on *Aulus Posthumus*, and *Titus Quintius Cincinnatus*, Dictators, and on many others.

- ¹⁶ They that had only an Ovation granted them, wore a Crown of Myrtle¹⁶, a Plant sacred to *Venus*, the Action of those Conquerors being, as they say, not considerable enough to deserve a Crown of Laurel, which was a Martial Crown, but that it was sufficient to allow them the Crown of *Venus*: Whether this was the true Reason for such a Distinction, I leave to the Judgment of the learned Reader. The *Corona Obsidionalis* was the Crown given to those that had rais'd a Siege; and was made of Grass, in *Latin*, *Gramen*, and for that Reason had also
^{17, 18} the Name of *Corona Graminea*¹⁷. The *Corona Muralis*¹⁸ was made of Gold, and was what the Person was honour'd with who first scal'd the Walls of a besieg'd
¹⁹ Town. The *Corona Vallaris*¹⁹, thought to be the same with the *Corona Castrensis*, was also of Gold, and was what they gave to those that first forc'd the Enemy's Camp, which is the reason it was adorn'd with Pallisades like the Pallisades of a
²⁰ Camp. The *Corona Navalis*²⁰ was the Crown bestow'd on him, who first boarded an Enemy's Ship in a Sea-fight: It was adorn'd with the Beaks of Ships, call'd in *Latin*, *Rostra*, and from thence had also the Name of *Corona Rostrata*. *Paterculus* and *Dio* say that *Agrippa* was the first who obtain'd a Crown of this sort; but herein *Festus* and *Pliny* differ from them.

- ²¹ IV. The *Corona Civica*²¹ was a Crown of Oak, given to him who had sav'd the Life of a Citizen, and was reckon'd at *Rome* the most honourable of any other. To be entitled to this, it was necessary that the Person, whose Life was sav'd, should give Testimony of it himself, the Witness of another not being sufficient. The Prerogatives attending this Crown were these; that he, who was possess'd of it, might wear it always; that when he went to any of the publick Sports, the Senate and People were to rise up as soon as he appear'd; that he was to assist at Spectacles among the Senators; that he was exempted from publick Offices, and not only he, but his Father and Grandfather by the Father's side also. By this honourable Distinction the Republick shew'd how much it had at Heart the Safety and Preservation of its Citizens.

But besides these Crowns given as a Reward of military Exploits, there were also others bestow'd at Games and on other Occasions: Such was the *Corona ex Apio*, a Crown made of Parsley or Smallage, in *Greek* *αέλιον*, given to those, who, according to *Lucian*, had overcome in the *Nemean Games*; the *Corona oleagina*, bestow'd on those who had conquer'd in the *Olympick Games*; and the *Corona pinea*, or Crown of Pine-branches, given to the Conquerors in the *Isthmian Games*. The Crowns of the *Agonothetæ*, or those that had the Disposal of the Prizes in publick Games, were of Gold. At Feasts there were Crowns also given to the Guests, of which mention has been made under the Article of Feasts. Crowns of Flowers were likewise put upon the Heads of their *Lares*, or domestick Gods. The *Corona plectilis*, as they call'd it, was what they made of any Matter that might be platted or wound together, as Ivy, Wool, Flax, Flowers, Leaves or Reeds: But what the *Corona plectilis* in *Pliny* means, is not easy to say. We have already taken notice of the Crowns of Ivy and Vine-leaves under the Article *Bacchus*. The *Corona oleagina*, or Crown of Olive above-mention'd, was given also to those that procur'd a Triumph for the Conqueror, tho' they had never been in the War themselves. There are Examples likewise to be found of their having been given to those that had been Conquerors in a naval Fight.



M. Mignard.

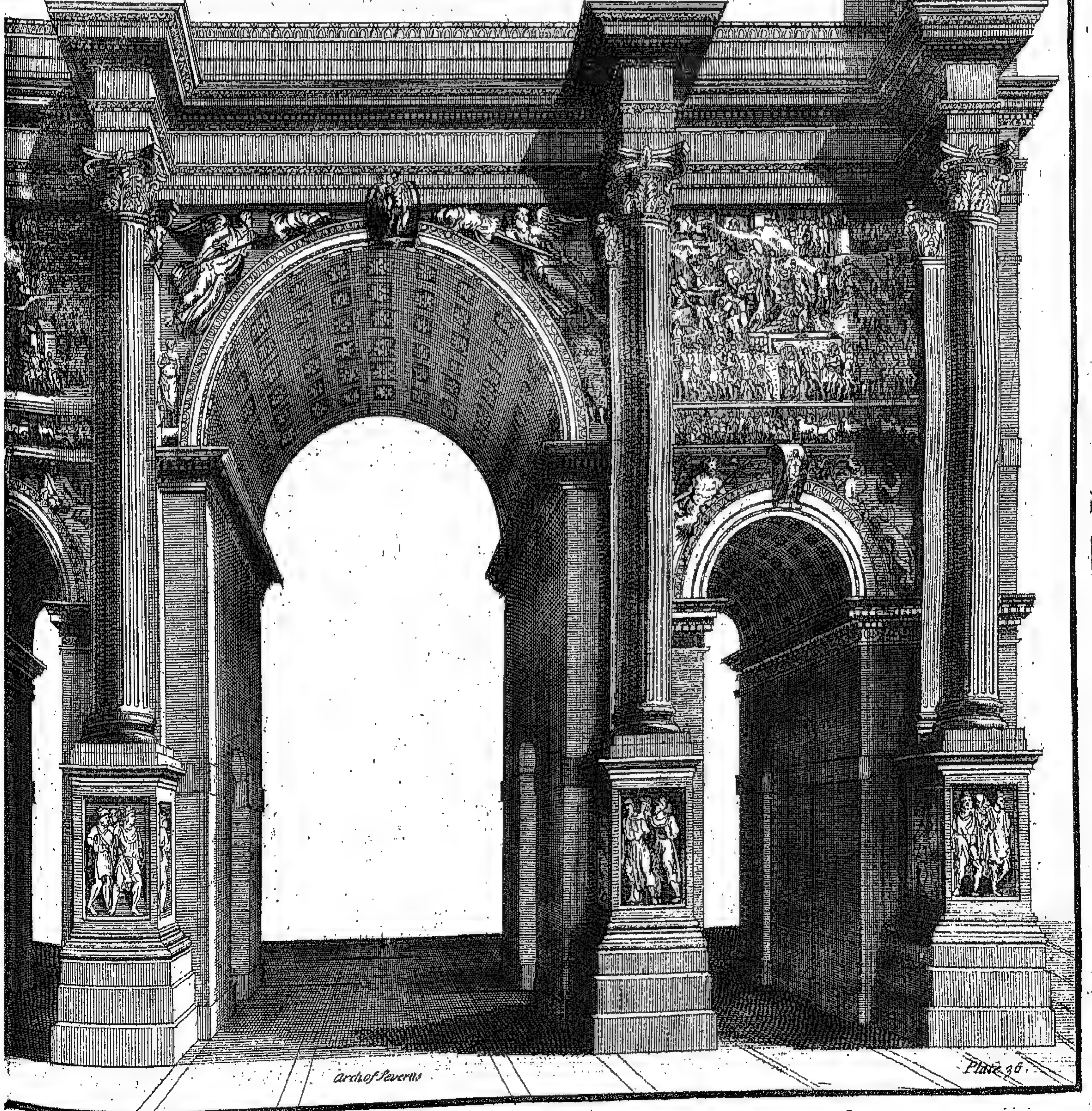


Vol. III

Arch of Titus



VIO. SEPTIMIO. M. FIL. SEVERO. PIO. PERTINACI. AVG. PATRI. PATRIAE. PARTHICO. ARABICO.
 HICO. ADIABENICO. PONTIFIC. MAXIMO. TRIBVNIC. POTEST. XI. IMP. XII. CO. SIII. PRO. CO. SEPT.
 ESM. AVRELIO. L. FIL. ANTONINO. AVG. PIO. FELICI. TRIBVNIC. POTEST. VI. CO. SPRO. COS. P. P.
 OPTIMIS. EORTIS. SIMESQVE. PRINCIPIBVS.
 REMPVBLICAM. RESTITVTAM. IMPERIVMQUE. POPVLI. ROMANI. PROPAGATVM.
 INSIGNIBVS. MIRTVTIBVS. EORVM. DOMI. FORISQVE. S. P. Q. R.



C H A P. VIII.

I. *The Triumphal Arches; and first of the Triumphal Arch at Orange, and other Arches.* II. *The Arch of Severus; a Question concerning that Arch.* III. *Constantine's Arch made of the Spoils of Trajan's Forum.* IV. *Other Triumphal Arches.*

I. **T**R I U M P H A L Arches were a sort of perpetual Monuments of Victories, some of which remain to this Day, and those not a few, and many more yet are to be seen in Medals. The most ancient of the Arches that are still extant, is that of *Orange*, erected, as it's said, in Honour of the Victory obtain'd by *Marius* and *Catulus* over the *Cimbri*, and here represented after a very exact Drawing made upon the Place by that most ingenious Architect M. *Mignard*²², who was 22 near Relation to the late celebrated Painter of that Name. This Arch is about eleven Toises or sixty six Foot long, and ten Toises or sixty Foot in height, and its Columns of the *Corinthian* Order. Above the two little Gates there are great Heaps of Armour, as Shields, for Instance, both oval and hexagon, Swords, Dragons and other Animals, which had serv'd for military Ensigns. This Arch is commonly said to be *Caius Marius's*, erected in Honour of the Victory obtain'd by him over the *Cimbri*, *Teutones* and *Ambrones*. But what would incline one to think it is some other Victory, is, that on the two sides of the Pediment there are great Heaps of Anchors, Prows, *Aplustra*, Oars and Tridents, which denote it a naval Victory, as the Heaps of Armour underneath signify a Victory obtain'd at Land; so that this Arch must have been erected in Commemoration of two Victories, the one won at Sea and the other at Land, which does not well agree with *Marius's* Victory over the *Cimbri*. *Joseph de la Pise*, however, who publish'd his History of *Orange* in the Year 1639, says that one of the Captives had been a long time fallen off from the West-side, where the Trophies and Captives were represented, and that a Stone also that sustain'd the Captive had fallen about forty Years before he publish'd his Book, which Stone had this Inscription upon it, *Theutobacchus*, which, he says, was the Name of the captive King, and adds that his Father had seen both the Stone and the Inscription. Now if it be really true that there was such a Name upon the Stone, it's very possible that it was the Name of some *Teutonick* King. At the top of the Arch is a Bass-Relief which represents a Battle, but so worn out and spoil'd, that little or nothing can be made of it. There is also at *Cavaillon*, a Town in *Provence*, the Remains of PLATE a triumphal Arch, part of which is yet standing¹. At *Carpentras* likewise there XXXVI. are some Footsteps remaining of an Arch, where there is also a Trophy² of the ¹/₂ Form of those given above in great number.

Titus's triumphal Arch at *Rome*, the most ancient of all that remain, is less than the rest of the triumphal Arches³: But we have already exhibited his Triumph as it is there represented. That which is call'd the *Portugal* Arch, was *Domitian's*, as it is thought, and ruin'd in the last Age.

II. There are two Arches of the Emperor *Severus*, the biggest of which, whose Figure we have here given⁴, is at the Foot of the Capitol. These Bass-Reliefs are 4 of great Service in our Enquiries into Antiquity, for which reason we have frequently made use of them in the Course of this Work. The celebrated Architect *le Serlio* was of Opinion that this Arch of *Severus* was compos'd of the Spoils of
of

of other Edifices; *è per quanto si vede è fatto de spogli d'altri edifice.* What might incline him to think so, is perhaps the Agreement observable between the *Parthian* Habit in this Arch, and the Habit of the *Daci* in *Trajan's* Column and other Monuments. But forasmuch as we know from Writers that these People were habited exactly alike, that both the one and the other wore the *Tiara*, the little Cloak, call'd by the *Parthians*, *Candys*, and the *Anaxyridæ* or *Braccæ*, there's no doubt but these Bas-Reliefs represent the Victories of *Septimius Severus*. But besides this, other Proofs might also be produc'd, if the thing was not already clear enough. Moreover it's not improbable that *le Serlio* meant no more by that Passage, than some Columns and other Ornaments common in triumphal Arches, which might indeed be taken from other Edifices. At the top of this Arch is a triumphal Chariot drawn by six Horses; the Triumphers are *Severus* and *Caracalla*; the rest the Reader is left to observe. The lesser Arch of *Severus* is situated near *S. George*, in *Velabro*. *Gallienus's* Arch has no Bas-Reliefs to adorn it, as the others have.

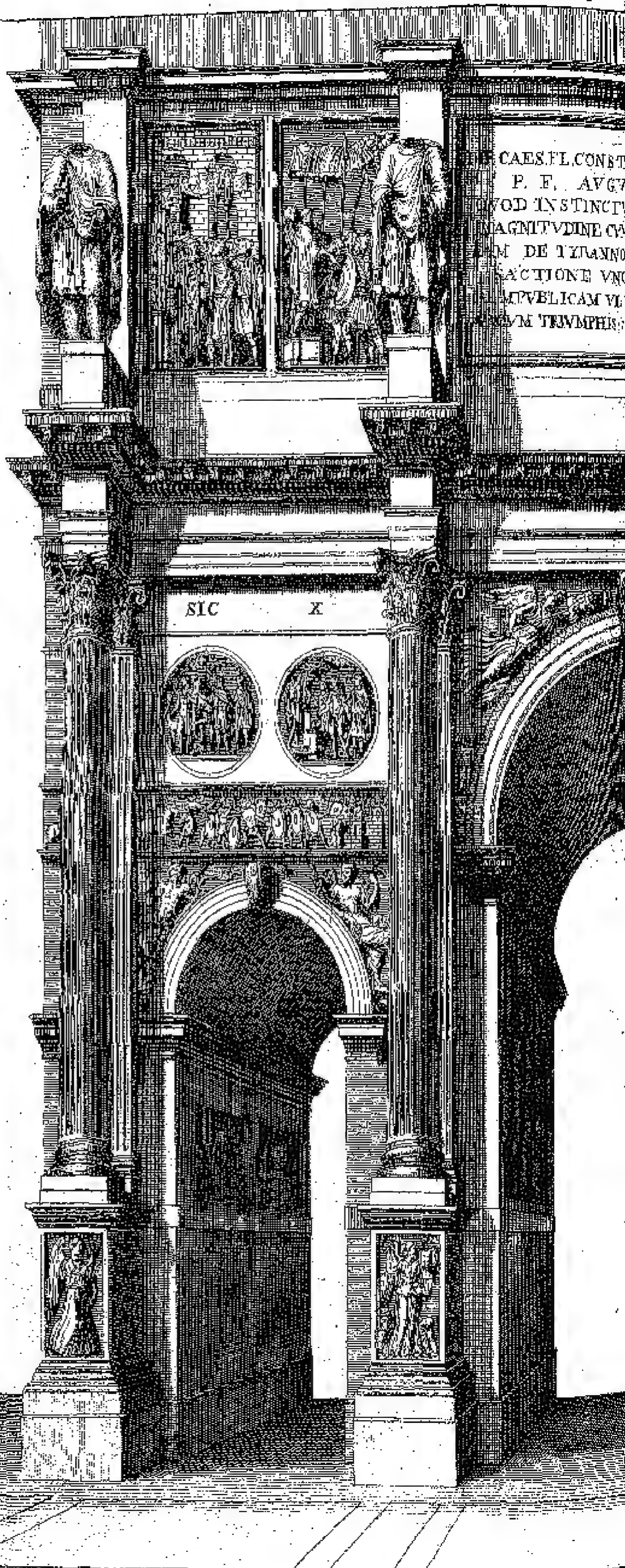
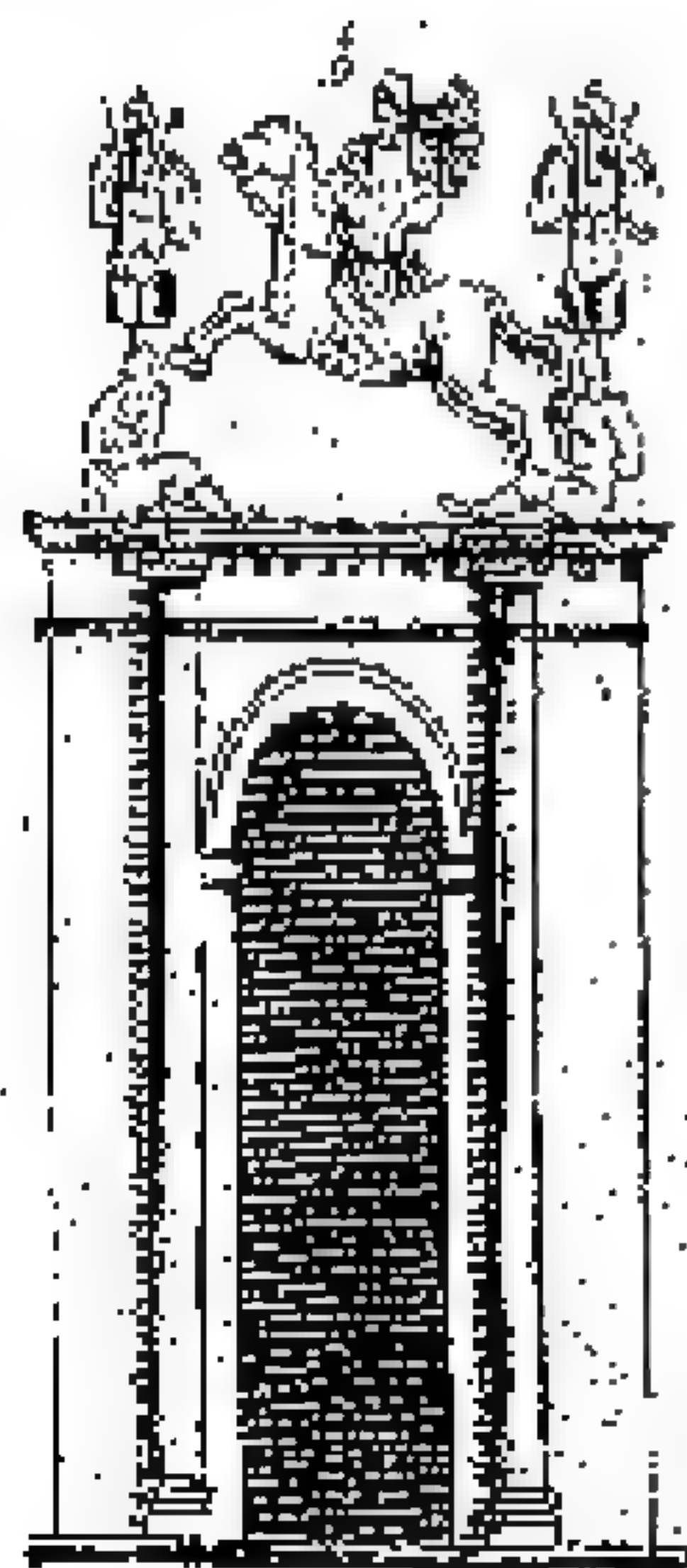
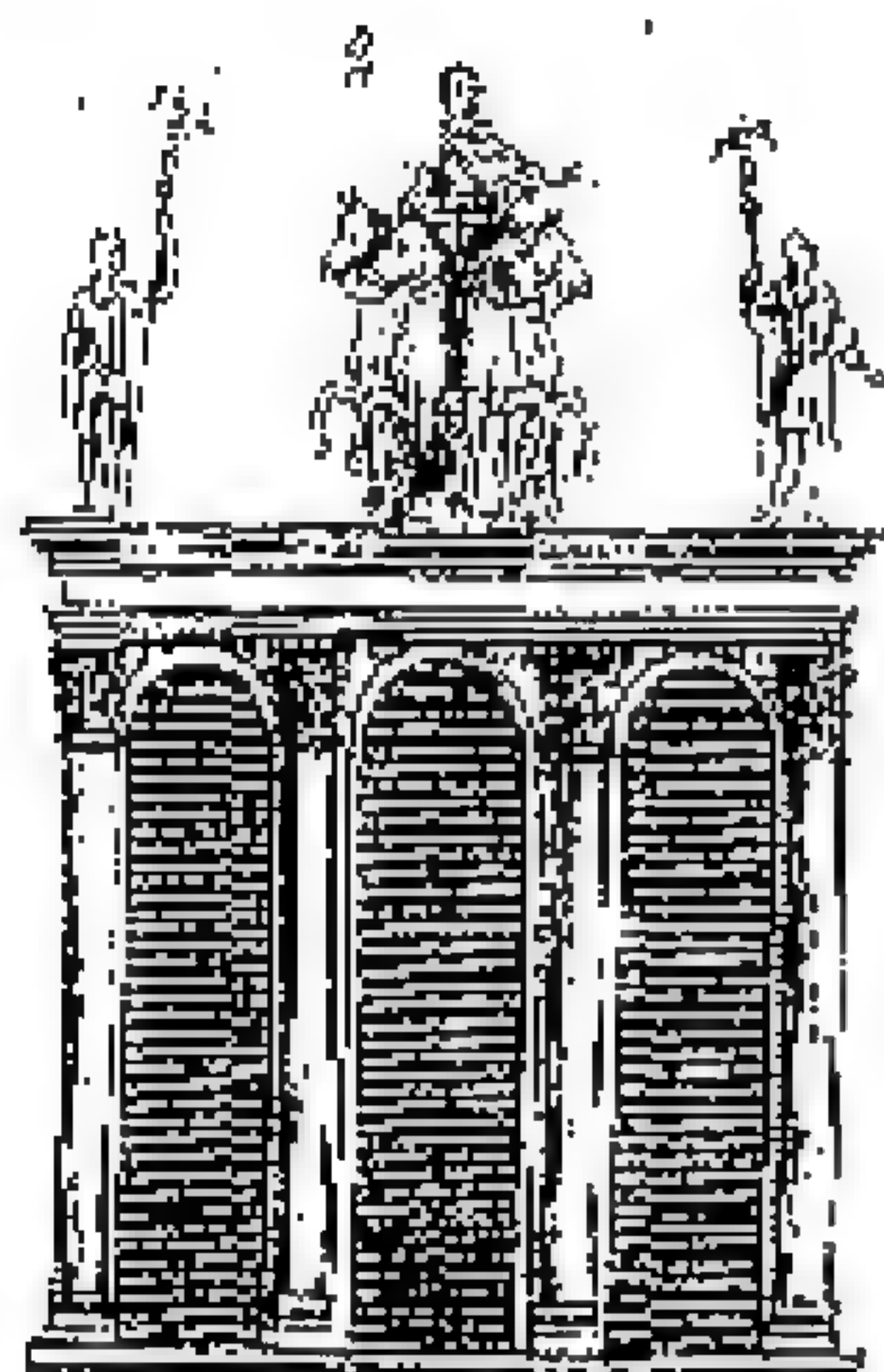
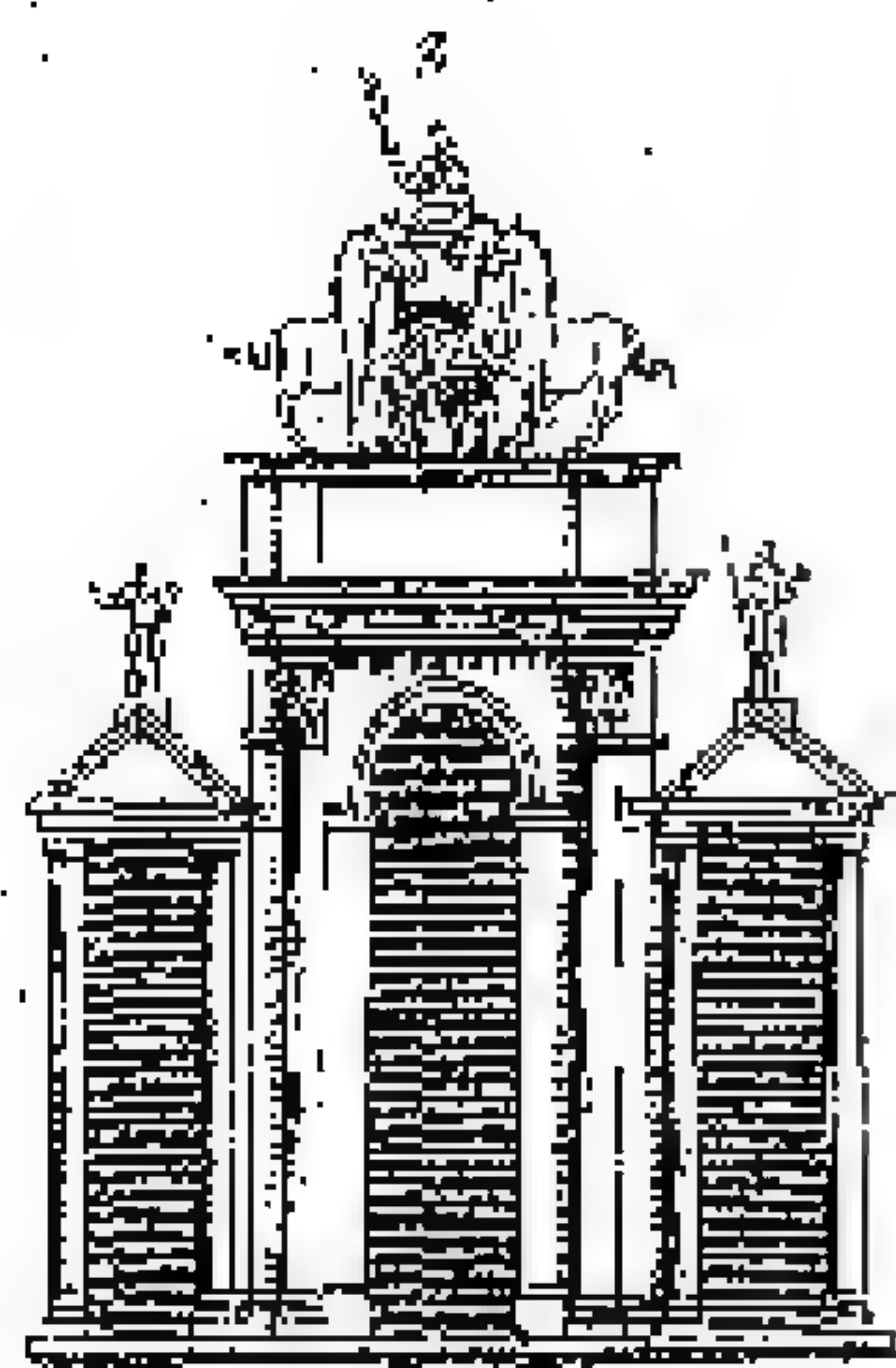
PLATE
XXXVII.

III. *Constantine's* Arch 'is esteem'd one of the most considerable, not so much on account of *Constantine's* Battles represented in it, as of *Trajan's* Monuments which adorn it, and which were carried thither from the *Forum Trajani*; concerning which we shall here relate what *Flaminius Vacca* has said, as it stands in our *Diarium Italicum*. 'I remember, says he, that in the Place call'd at this Day ' *Spoglia Christo*, not far from *Trajan's* Column, some Remains of a triumphal Arch ' were dug up, together with many Histories represented in Sculpture, now in the ' Possession of *Dom Prospero Boccapaduli*, then Præfect of that Region. There ' the Emperor *Trajan* appears on Horseback passing a River, and there Captives ' are brought, not unlike those in *Constantine's* Arch, nor yet of different Sculpture: Nay, I examin'd the whole very carefully, and from the best Observation ' I could make, it appears to me beyond Contradiction, that they are both the ' Work of one Artificer. Round the Column there seems to have been a four-square Collonade, and that each Face of the Collonade had an Arch in the middle. This however is certain, that *Constantine's* Arch was transported from another Place, and tho' the Sculpture of the Base made in *Constantine's* time hath the barbarous Taste of that Age, yet I dare venture to say that the Body of the Arch is one of the four Arches above mention'd, and that all the Sculpture and Bas-Relief in the upper Part were done by the same Hand with those in *Trajan's* Column. Besides the Figure of *Trajan* appears often therein, and the Histories there represented are such as regard that Emperor.

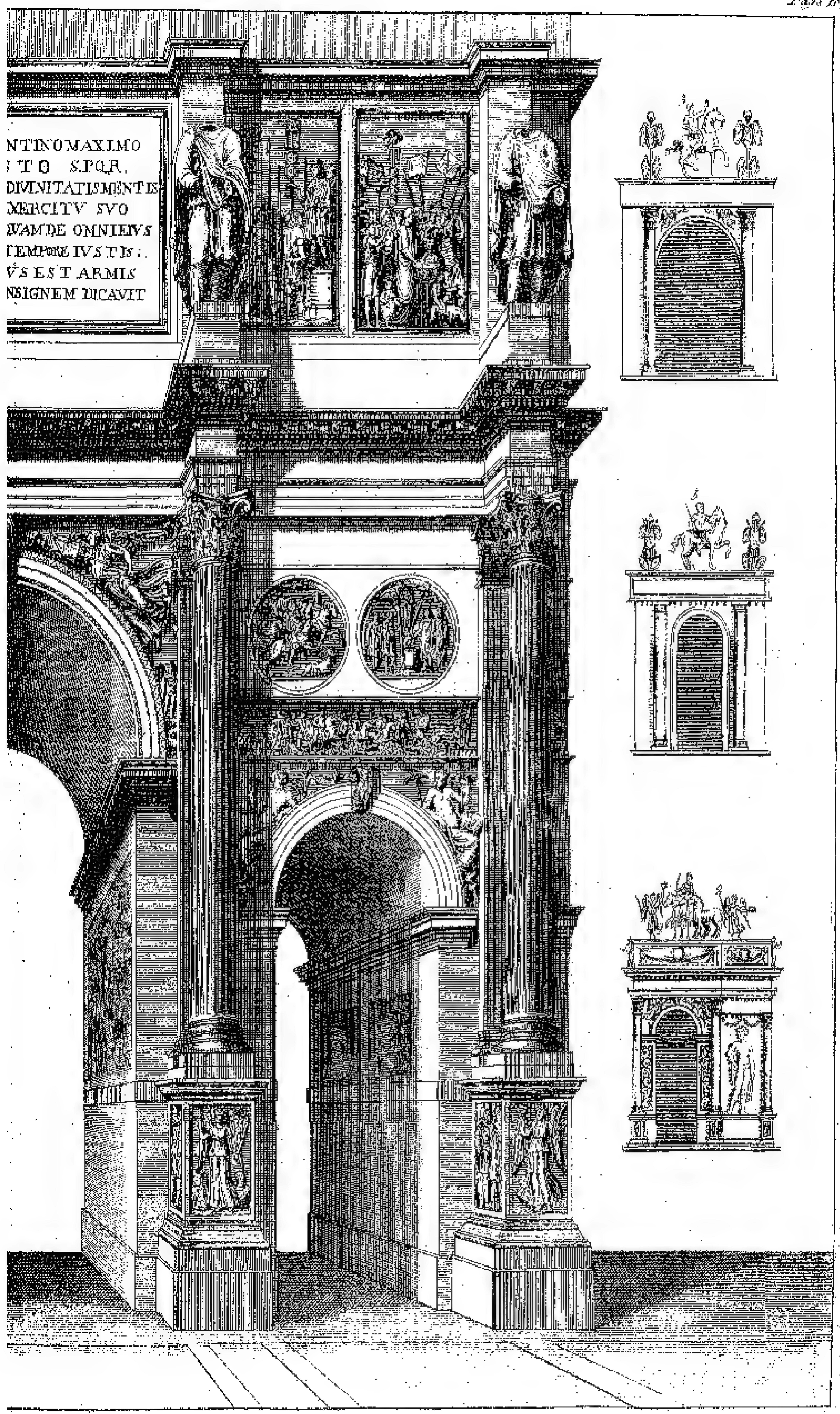
What *Flaminius Vacca* says there, is very probable: Nor is it at all to be doubted, but that these Bas-Reliefs which appear to be the Work of a brighter Age, were transported from what they call'd the *Forum Trajani*. As to what that Author says of the four Arches and Collonades which encompass'd the *Forum Trajani*, and in the middle of which was the Column; all that is very probable: And in this case the Front of the *Forum Trajani* upon a Reverse of a Medal of that Emperor, in the middle of which is an Arch with this Inscription, *Forum Trajani*, is but one of the Sides of the Quadrangle.

Thus have I given you this triumphal Arch, the Bas-Reliefs of which we have made use of in many Parts of this Work. Every one knows that the Heads as well as the Hands, wanting in the Statues plac'd at the top of the Arch, have been stolen away.

IV. The twelve triumphal Arches of this and the next Plate were taken from Medals; but are all different from each other. Some represent *Quadrigæ* upon the top²: others Horsemen riding among Trophies³: one of them has Chariots drawn

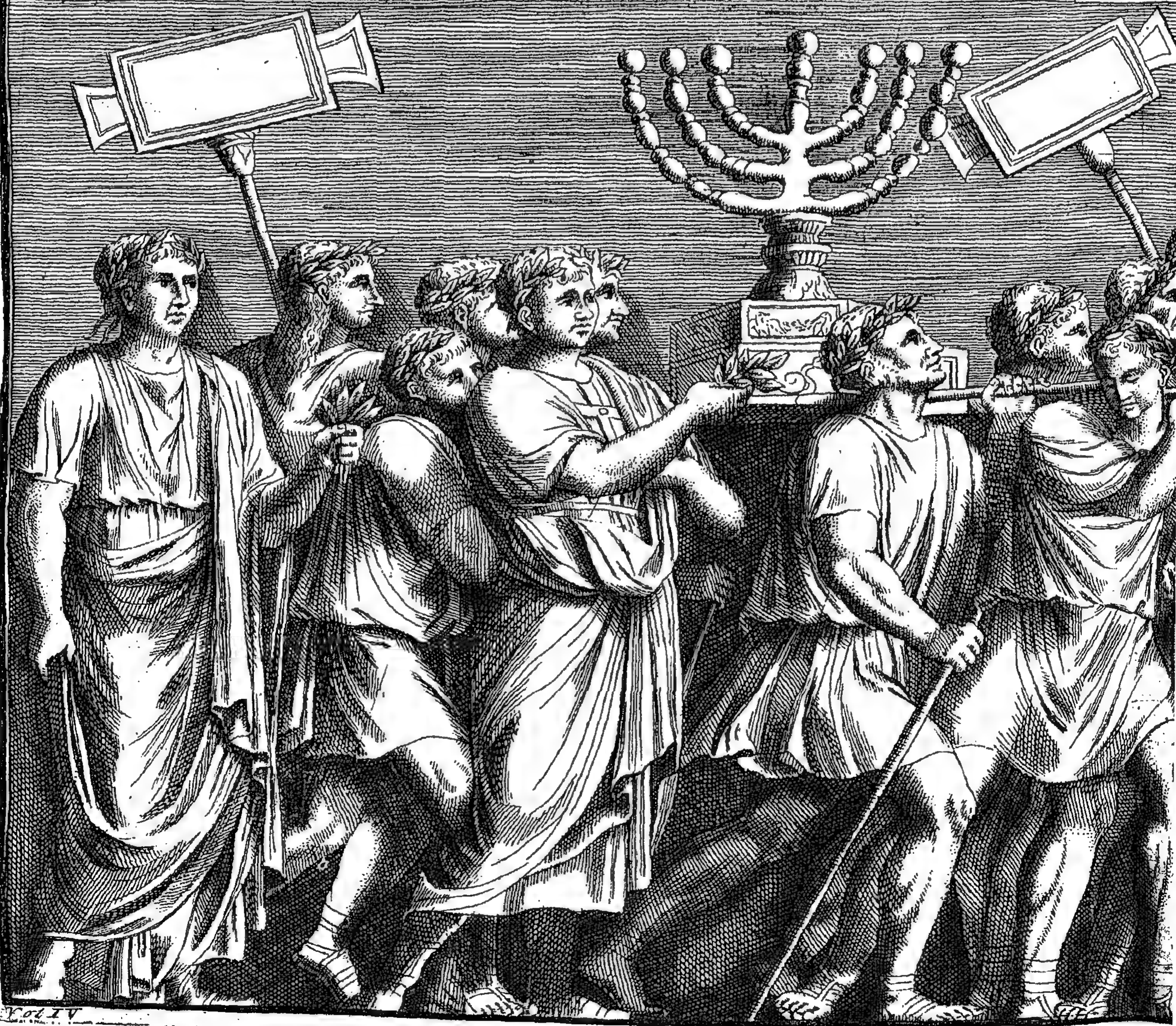


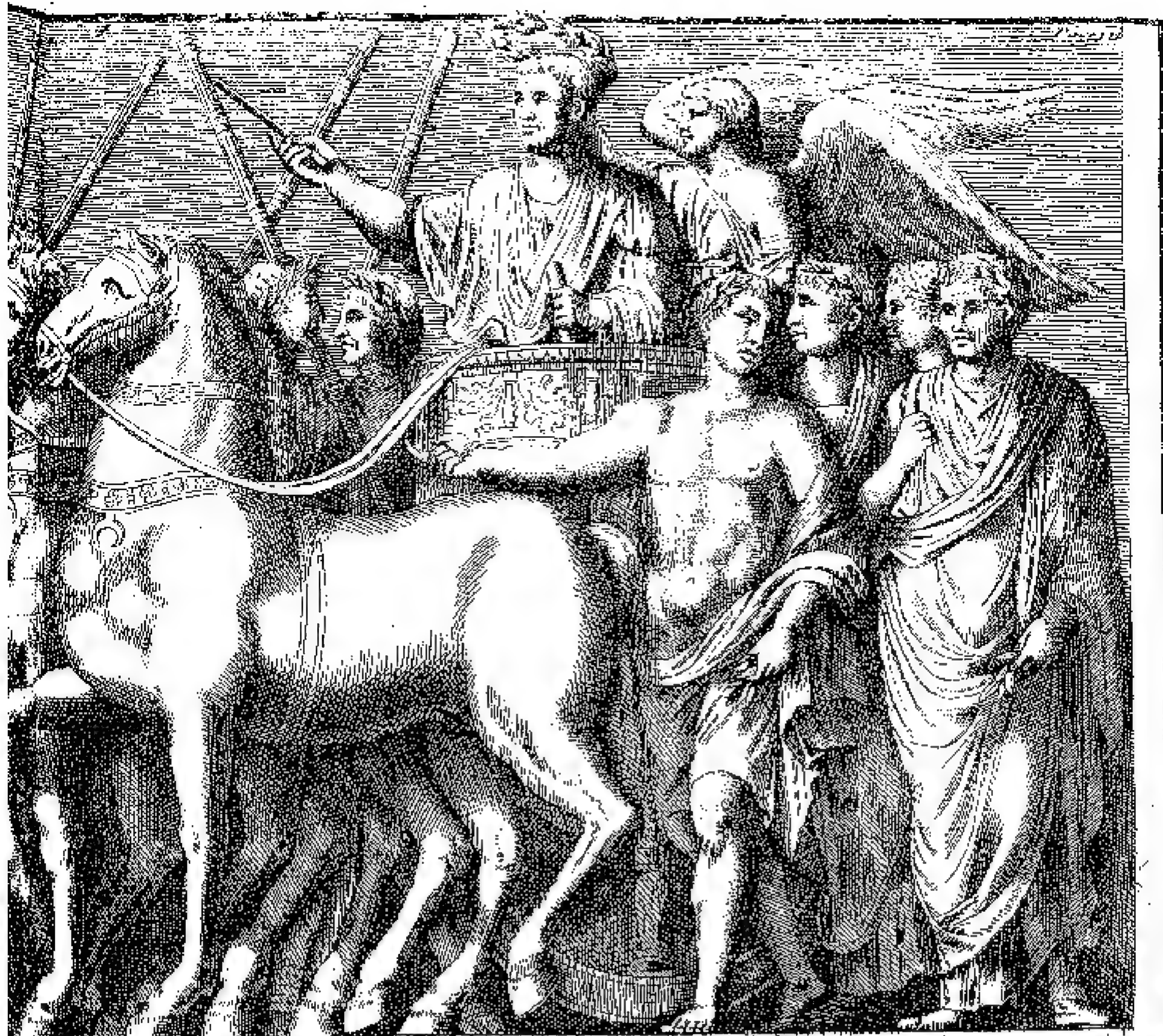
NTINO MAXIMO
TO SPQR
DIVINITATIS MENTE
XERCITV SVO
IVAMDE OMNIVS
TEMPORIS IVS TIS
VS EST ARMIS
NSIGNEM DICAVIT

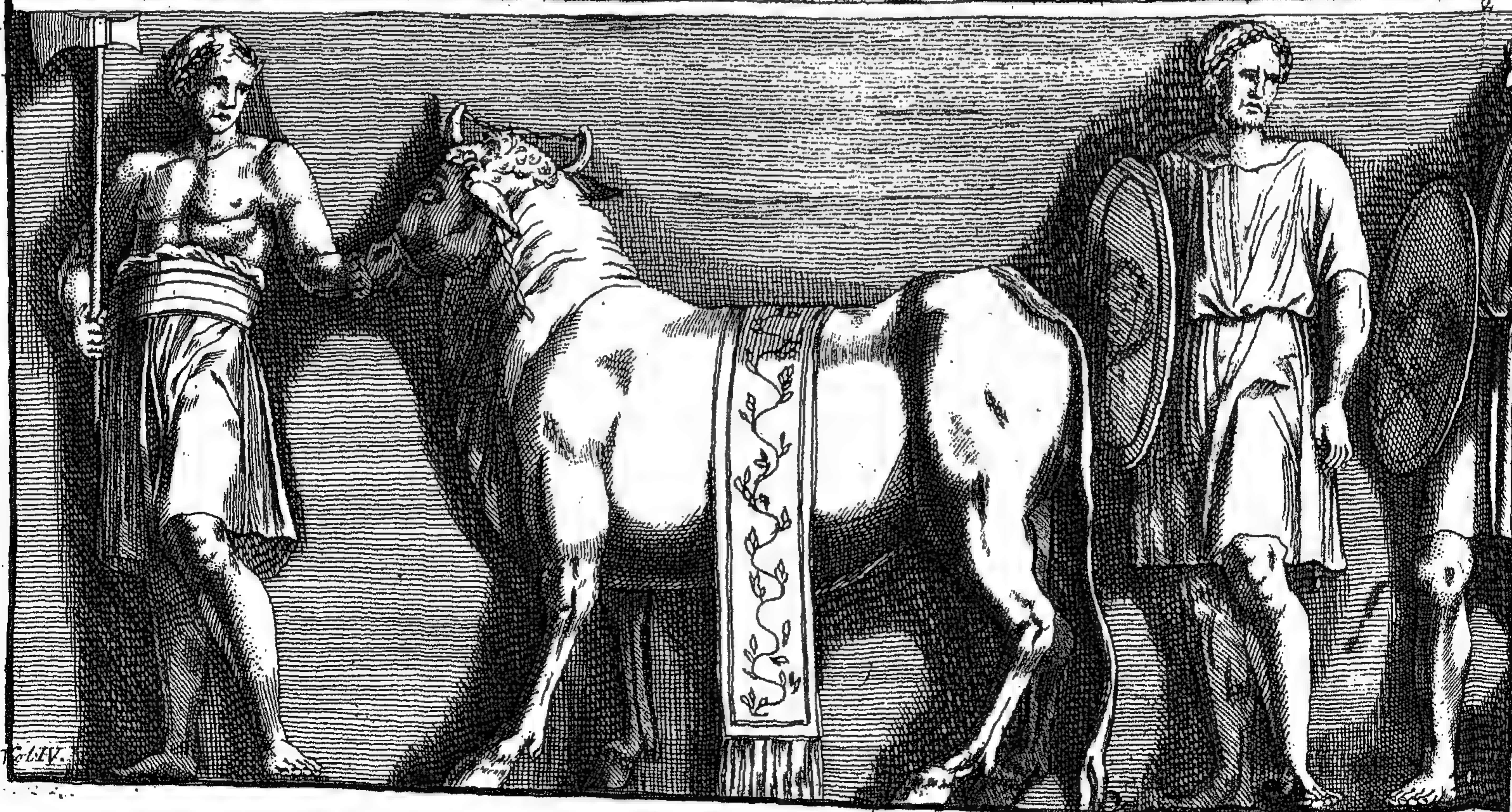
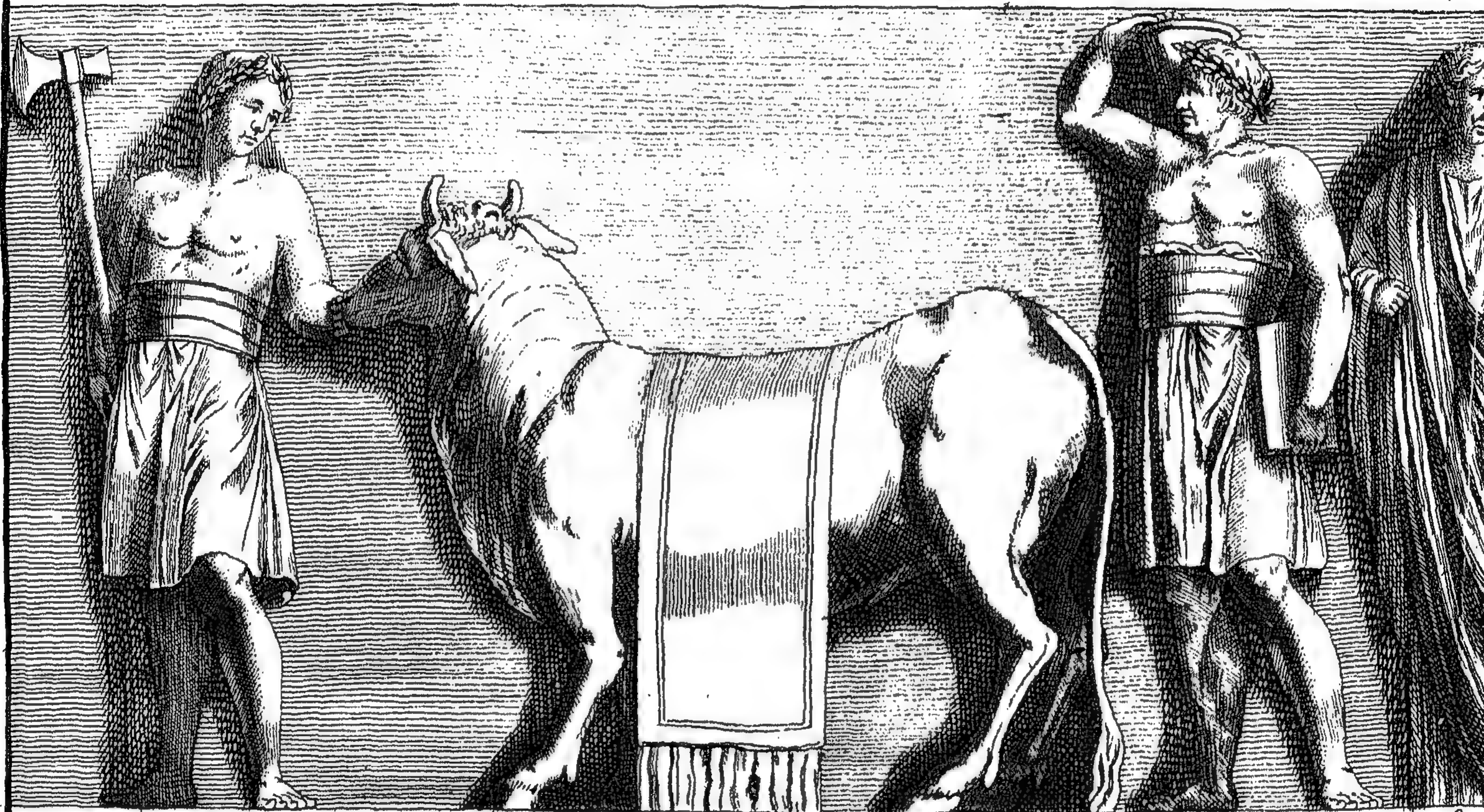
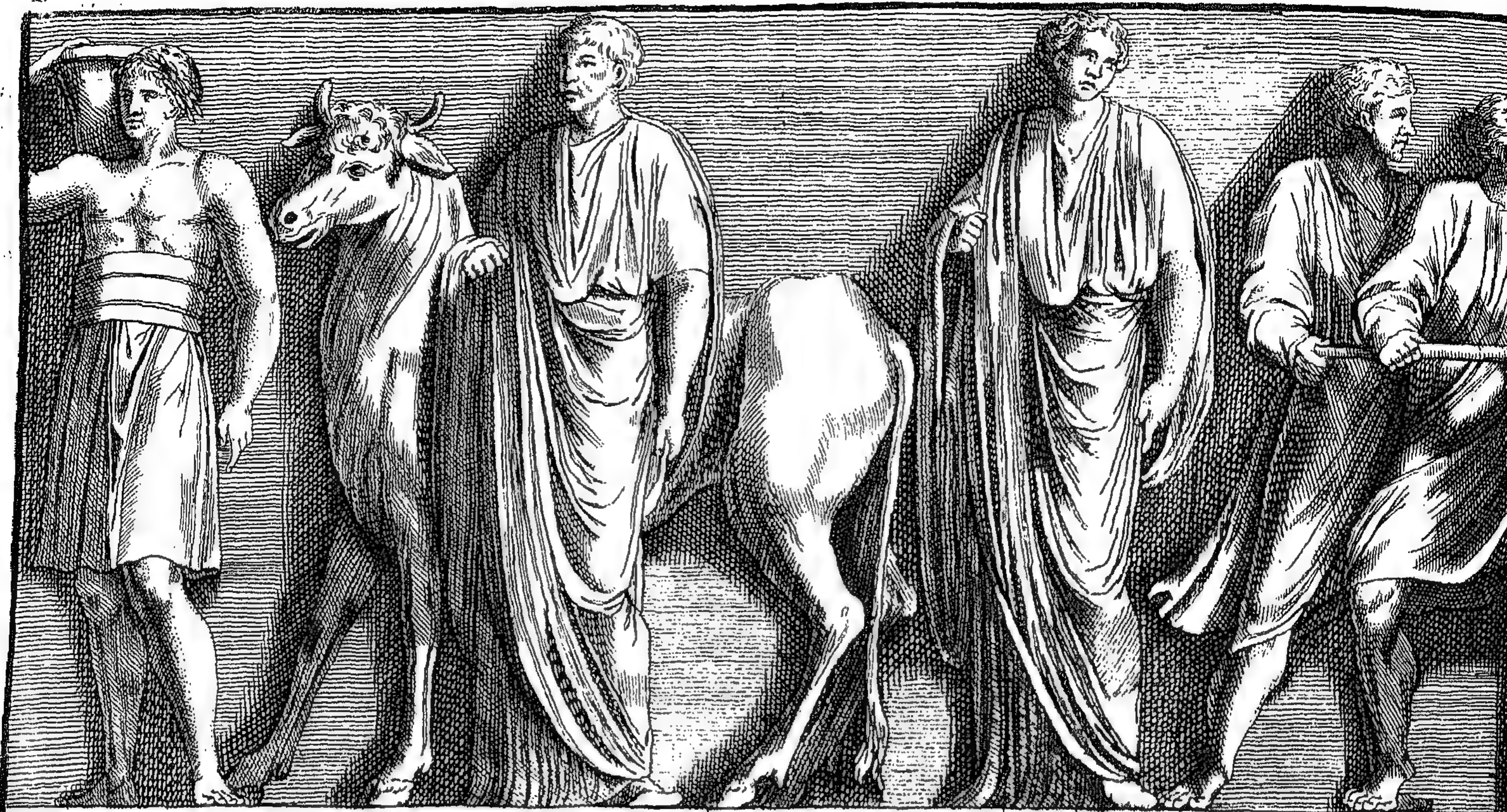


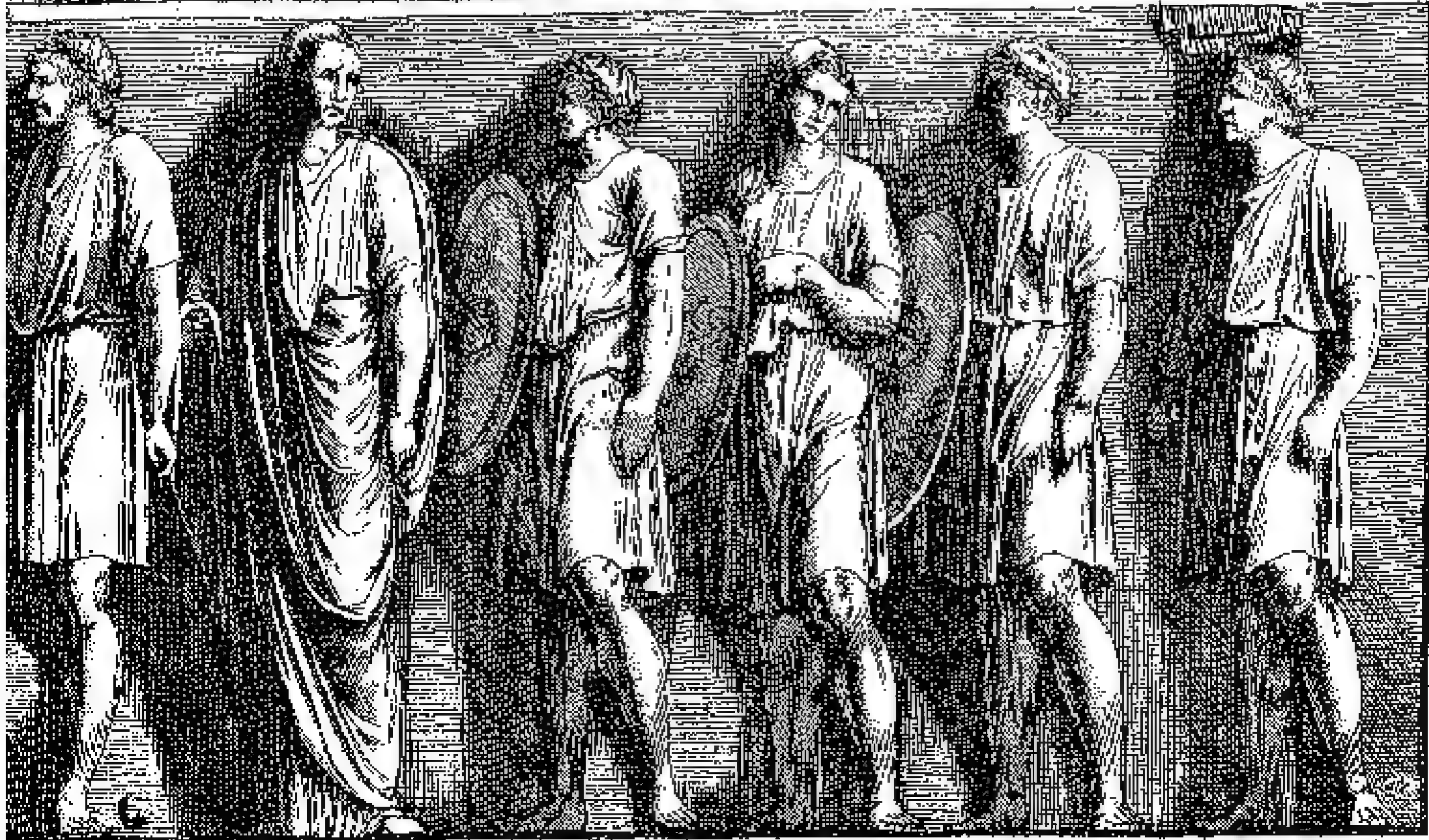
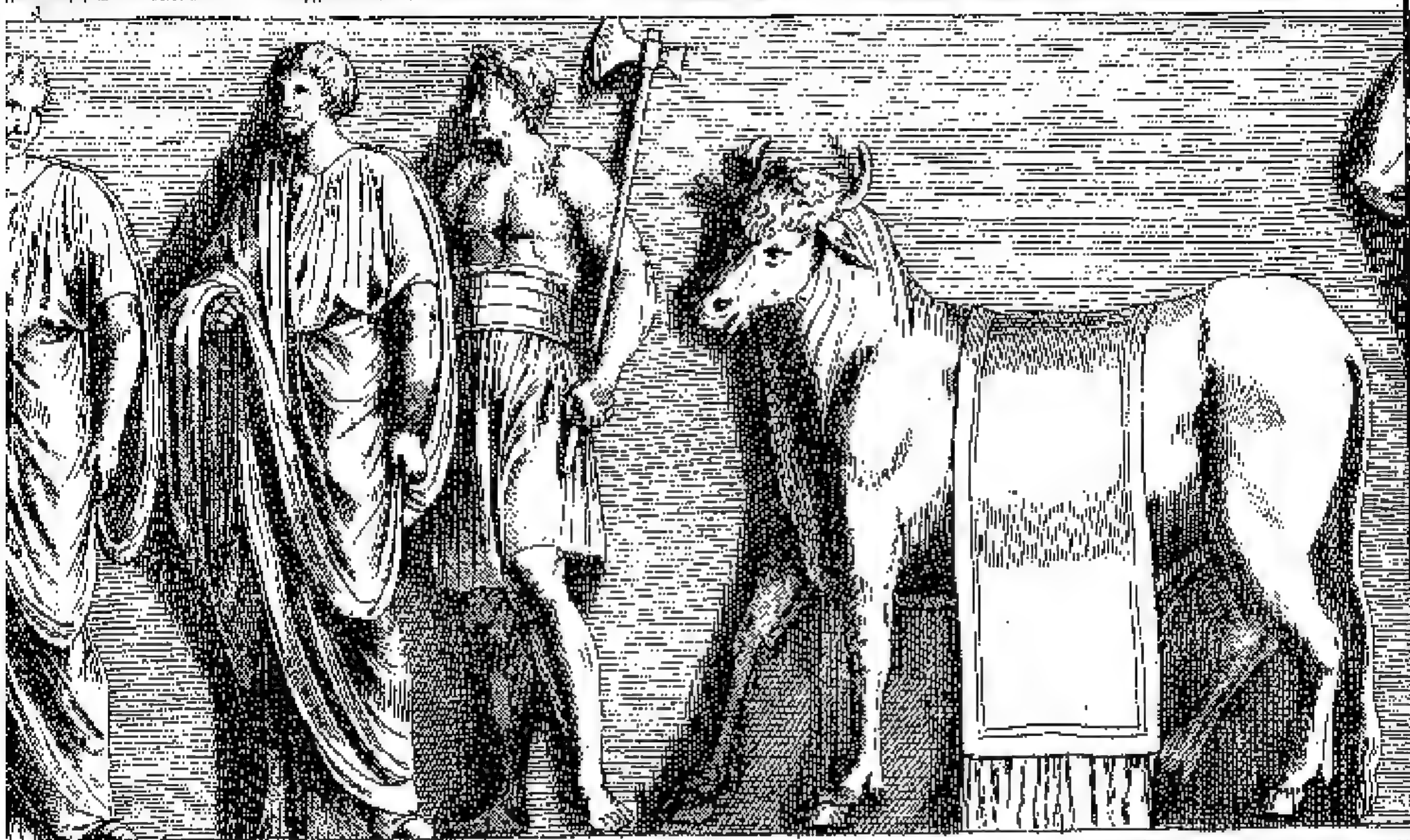
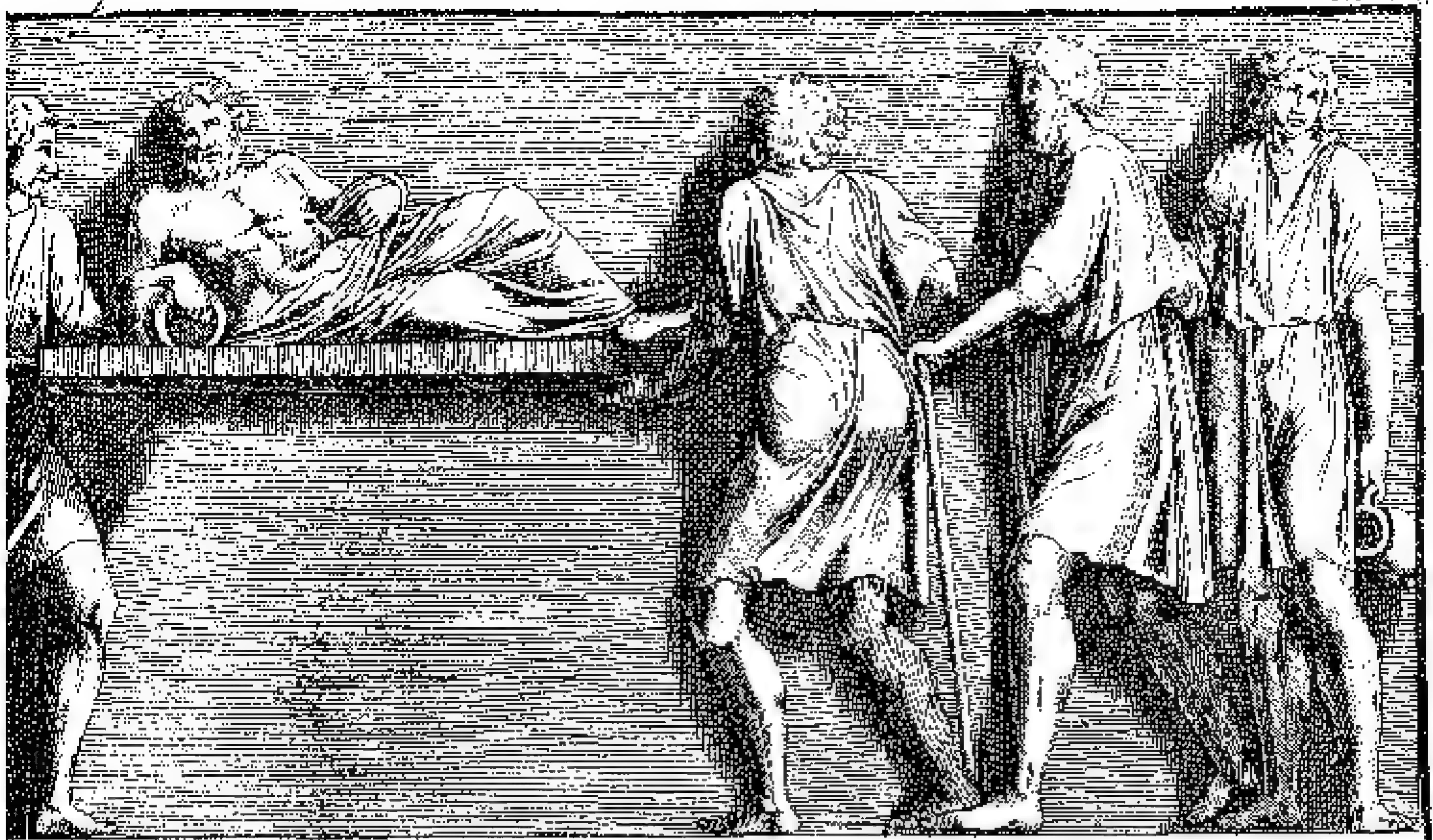


Titus's









drawn by four Elephants¹. The tenth is very remarkable for the Chariot's being drawn by ten Horses²: The last in my Opinion is *Severus's* greater Arch³, which he have just now represented.

PLATE
XXXVIII.
1
2, 3

C H A P. IX.

I. Trajan's Pillar, and the true reading of the Inscription. II. Antoninus's Pillar. III. The Obelisk at Autun. IV. The Columna Rostrata, or Pillar of Duillius.

I. **T**RAJAN's Pillar⁴, that beautiful Monument of Antiquity, which in-
forms us of so many things, stood in the middle of *Trajan's Forum*, in the same place where it is at present: It is a little Tower which you go up by winding Stairs. The several Parts of these Bas-Reliefs have been already represented in this Work, by way of Explanation of the Subjects we were upon. The Inscription upon the Base is this:

SENATUS. POPULUSQUE. ROMANUS
IMP. CAESARI. DIVI. NERVAE. F. NERVAE
TRAJANO. AUG. GERM. DACICO. PONTIF
MAXIMO. TRIB. POT. XVII. IMP. VI. COS. VI. PP
AD. DECLARANDUM. QUANTAE. ALTITUDINIS
MONS. ET. LOCUS. TANTIS. OPERIBUS. SIT. EGESTUS.

This Inscription is now so mutilated, that at the bottom there is read no more than TANT. . . . IBUS, which certainly ought to be supply'd and read *tantis operibus*; and for this we have not only the Authority of an anonymous Author of the 9th Century, publish'd by F. *Mabillon*, but also a MS in our own Library, written in the 15th Century, when the Inscription was unbroken; both which MSS read *tantis operibus*. *Marlianus* and *Mazochius* also, who wrote in the Reign of *Francis* the first, read it in the same manner. Thus also the Count *Landi* has it, in a Work of his upon Medals, written in the Year 1559, and printed at *Leyden* in 1695. After all which *Fabreti*, in his *Trajan Pillar*, p. 51. proves that this broken Part of the Stone could contain no other Letters to make it Sense than those that make up those two Words. They therefore that would have had it read *tantis opibus*, or *tantis ruderibus*, or *tantis ex collibus*, or *tantis molibus*, were most certainly mistaken.

II. To *Trajan's* Pillar we have added *Antoninus's*⁵, which we have also made great Use of in the Course of this Work. This is likewise a small Tower with a winding Stair-case; the exterior Face of which Tower is all Bas-Relief, which represents the Victories of the Emperor *Marcus Aurelius* against the *Marcomanni* and other *German* Nations.

III. The Obelisk in this Plate⁶ was taken from the History of *Autun*⁶ by *Auberi*, a Book which was never quite printed off, and whose Leaves by the Author's Death are so dispers'd, that there remains but one entire Copy of it, which was sent me from *Autun*. This broken Obelisk, a good part of which is fallen, is yet in its present Condition four and twenty Foot high: 'Tis a

triumphal Obelisk, full of Swords laid cross-wise, Arrows and Axes, and at the Foot of it has two Torches also laid cross-wise. This, without all doubt, is a Trophy, and the Mark of some Victory; but as there is no Inscription upon it, we neither know when, nor upon what Occasion it was erected.

- 7 IV. The *Columna rostrata*⁷, so call'd from its being adorn'd with Beaks of Ships, call'd in *Latin*, *Rostra*, was erected in Honour of *C. Duillius*, after the naval Victory obtain'd by him over the *Carthaginians*: This is to be seen at *Rome* at this Day, together with an antique Inscription as old as the Column it self, but so spoil'd and maim'd, that there is hardly a third Part remaining unhurt. *Lipsius* indeed endeavour'd to restore one Part of it: But *Giaconius* went a great deal farther, and restor'd the whole from Conjecture. Tho' there are many very learned Observations in his Explication, yet we have no Reason to depend upon his Reading, seeing he himself durst not affirm it to be genuine. The two Me-
- 8 dals of *Bibulus*⁸ plac'd here, denote that he commanded in a Naval Fight, and
- 9 the Trophy upon the Prow of the Vessel⁹ denotes also a Victory obtain'd at Sea.

The End of the First Part of the Fourth Volume.



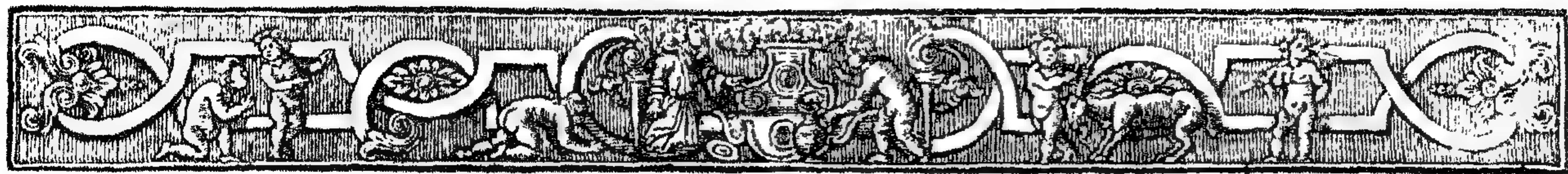
ANTIQUITY

EXPLAINED,

And REPRESENTED in

SCULPTURES.

VOL. IV. PART II.




PART II. BOOK I.

Concerning the Publick Ways, Bridges, Chariots, Carriages, and Aqueducts.

CHAP. I.

I. The Roman High-ways the most magnificent of all their Works. II. The High-ways of Italy better made than those of the Provinces. III. After what manner those Ways were made. IV. Banks called Margines, raised on the side of those Ways.

I.  **AMONG** the many Monuments of the *Roman* Magnificence, the three most admir'd, and which even exceeded the seven Wonders of the World, were the High-ways, Aqueducts and Common-shores: The first of these, however, far excell'd the other two in Grandeur, as every one must own, who considers the vast Extent of them, the Firmness and Strength of their Structure, and the immense Sum of Money the making of 'em must cost. For as to the Aqueducts, how great and wonderful soever they were, yet were they confin'd within the Boundaries of *Rome*, and some other considerable Cities, and the *Cloacæ* or common Shores within *Rome* only; whereas these High-Ways reach'd from *Hercules's* Pillars quite through *Spain* and *Gaul*, as far as the River *Euphrates*, and even to the most southern Part of *Egypt*.

The Center of all these great Roads was a Stone plac'd in the middle of the City, call'd *Milliarium Aureum*; from whence the Roads divided into a great many Branches, and pass'd through all the Parts of the *Roman* Empire. *Isidorus* says the *Carthaginians* were the first that pay'd the Roads, and that the *Romans* afterwards so improv'd the Art, that they carried Causeways almost quite through the World, partly, as he says, for the Convenience of Travelling, and partly to keep the People out of Idleness.

II. The Roads in *Italy*, if we may judge of them by what remains thereof at this Day, were much better than the rest, as may be seen more especially in the *Flaminian*, *Appian* and *Æmilian* ways, which were the principal Roads of that Country. And tho' the *Appian* Way is now about two thousand Years old, yet is it to be seen whole and entire for the space of many Miles not far from *Fondi* in *Campania*; not to mention many other Places, where there remain considerable Ruins: But the Stones of the Pavement being pretty much shaken and loose, they avoid it as incommodious and troublesome to Coaches and other Vehicles of that kind.

III. In other Places there are found long Pieces of Causeway, whose Surface is firm and unshaken, and smooth withal as Ice. The Stones thereof are a sort of Iron Colour, and of a Hardness that exceeds Marble; but the Figure of them very irregular, some of them being Hexagons, and others Pentagons. *M. Fabretti*, in his *Trajan* Column, says that the Stones of these Roads are all Hexagons, except

cept those at the Borders which are Pentagons: But this I dare not affirm will always hold. Some of these Stones are near two Foot in length, others less, but the shortest are full one Foot. And here notwithstanding the Irregularity of their Form, they are so nicely join'd together, that in many places one cannot get the Point of a Knife between. The Superficies, as we have already observ'd, is all as smooth as Ice, and in rainy Weather is so slippery, that the Horses cannot travel upon it without Danger; nay, let the Weather be never so dry, it's dangerous going fast over the smoothest Parts of it. These Stones of the uppermost *Stratum*, which make the Surface of the Causey, are about a Foot thick of the King's Measure. These Roads are always higher than the Ground on each side, and in some Places they are even carried thro' Mountains and Rocks, as may be seen about *Terracina*, where the Rock they cut through is near a hundred and twenty Foot high. The Rock it self serves for the Road, there being no need of other Pavement, and the Surface of it left a little rough, that Horses may travel with more Security.

This wonderful Firmness of the *Appian* and other High-ways, is not only occasion'd by the Size and Hardness of the Stones, and the Closeness of the Joinings, but also by the Materials underneath: For I have observ'd, between *Velletri* and *Sermoneta*, a part of the *Via Appia*, or *Appian* way, from whence all the great Stones of the upper *Stratum* were taken away, so that I had an Opportunity of considering at leisure the Structure and Composition of the under Work, which is this. The Bottom or Foundation of the whole is a sort of Rubbish, or Pieces of rough Stone join'd together with a very strong Cement; above which is another *Stratum* of coarse Gravel cemented in like manner, and mix'd with little round Stones; which second *Stratum*, so long as it was soft, easily admitted into it the Stones that compos'd the Pavement, so that how unequal soever these Stones were in thickness, they found always a proportionable Depth in the middle *Stratum*, by which means the Surface was easily made even; which could not have been, had it been laid immediately upon the first *Substratum*. The whole Causey thus compos'd of several *Stratums*, was about three Foot high.

IV. There were some Places where these Causeys or great Roads had Borders, for the Convenience of Foot Travellers: But I do not think this was general, having my self seen many Places, where these Causeys remain entire, without the least Marks of any such Borders, or *Margines*, as they call'd them, the Breadth of which was at least two Foot, and the Height a Foot and a half or thereabouts. But besides the Convenience of these Borders for Persons that travell'd on Foot, they were perhaps also intended to serve for mounting on Horseback, before the Use of Stirrups was found out. The common Breadth of these Roads is something less than fourteen Foot, which was just sufficient for two Chariots to pass in. 'Tis now about two thousand Years since those Causeys were first made, when Chariots and other Carriages were probably less frequent, since which time nothing has been added to their Breadth.



C H A P. II.

I. The Form and Structure of the great Ways without Italy. II. What the Mansiones and Mutationes were. III. The Grotto of Puteoli, or a Way cut thro' a Mountain. IV. Another Way like it under the Capitol at Rome.

I. THE other great Roads out of *Italy* were not of the same sort of Structure; and were made of other Materials, and broader also than those in *Italy*, as may be seen by the Ruins that remain thereof in *Belgick Gaul*. These Roads, according to *Bergier*, were made by throwing up two parallel Ridges of Earth, and afterwards filling up the Ditch between them either with Sand or some other sort of Clay that would better consolidate than common Earth. This Ground-work they afterwards made more firm and compact with Rammers and other Instruments, for fear the whole Mass, had it not well consolidated the several *Strata* laid upon it, should happen to give way. In low and marshy Ground they took Care to raise the Roads, so as to secure them against Floods, and where the Earth requir'd it, they were made five, ten, and sometimes twenty Foot high, that the Waters might never rise above them. These Roads they made of several *Strata* laid one upon another; the first of which, as has been observ'd, was of Sand or other Earth; the next was of small flat Stones, and the uppermost of Flints so closely cemented, that the Causey would endure firm for many Ages. The Construction, however, of these Causeys, and the Disposition of the *Strata*, were not the same in all Places. Some Countries also were of so dry a Soil, that they had no Occasion for any Pavement at all.

II. Upon these Roads, at the Distance generally of half a Day's Journey, they were provided with Inns, by them call'd *Mansiones*, but by the *Greeks* *Movæ*. Of these *Mansiones*, *S. Athanasius* reckons six and thirty in the Road from *Alexandria* to *Antioch*; the very same number which *Antoninus* takes notice of in his *Itinerary*. The same *Athanasius* reckons also fourscore between *Seleucia* in *Isauria* and *Milan*. But besides these *Mansiones* or Inns, they had also certain Places on the Road call'd *Mutationes*: These were Stages, where the *Veredarii* or Couriers stopt to take fresh Horses.

III. We have already observ'd, that the *Romans* sometimes open'd High-ways through Mountains, of which we have an Example remaining in the Grotto of *Puteoli*, where a steep Mountain between that City and *Naples* is cut through from one end to the other, so as to be travelled through. At the Extremities of the Mountain the Passage is very high and lofty, but grows lower by degrees as you go forward, which was so contriv'd for the sake of letting in the Light as far as possible: But because the Way through, notwithstanding this, was very dark, especially towards the middle, they bor'd the Mountain through the top, to let in Light also from above. This, however, did not altogether answer the End; but in spite of what they did, it still remain'd dark; so that the Carriages which pass'd that way were in danger of running foul upon one another when they met, if the Drivers did not take Care to hollow and give one another notice, to take either that side next the Sea, or that next the Mountain.

IV. There was also a subterraneous Road at *Rome*, which pass'd through the *Mons Capitolinus*, as we learn from *Flaminius Vacca*, who says that his Master *Vincent de Rossis* went down at a Hole in the Place where the Capitol stands, and saw the Road, both Ends of which were stopt up with the Ruins that fell from the old Capitol; since when the whole is buried in like manner under Ruins.

'Tis not at all to be wonder'd at, that the *Romans* who cut through such great Mountains, should make a Way through this, which was indeed no more than a little Hill, for the sake of going from the grand *Forum* to the Region of the *Circus Flaminius*, which was on the other side the Capitol.

C H A P. III.

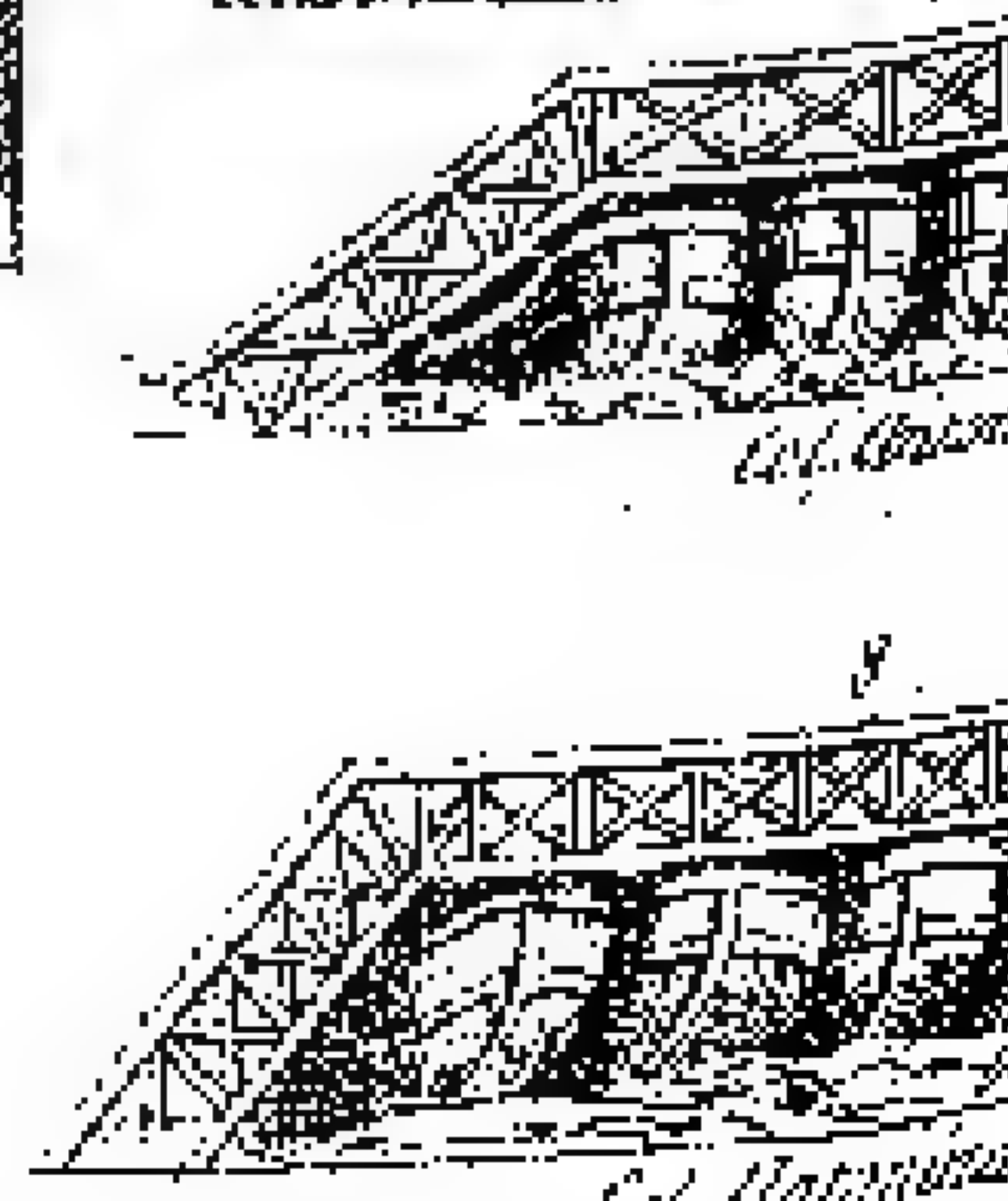
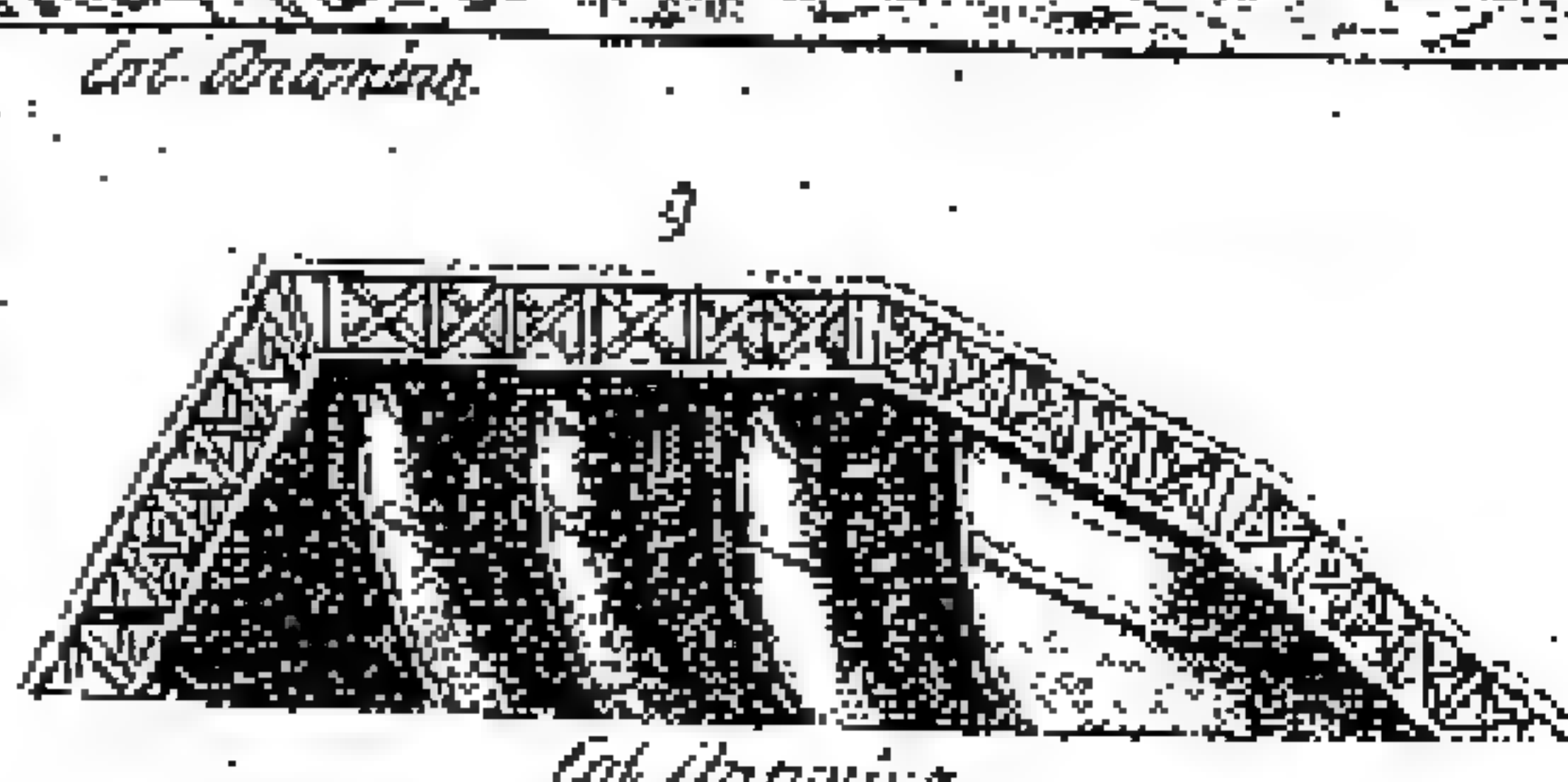
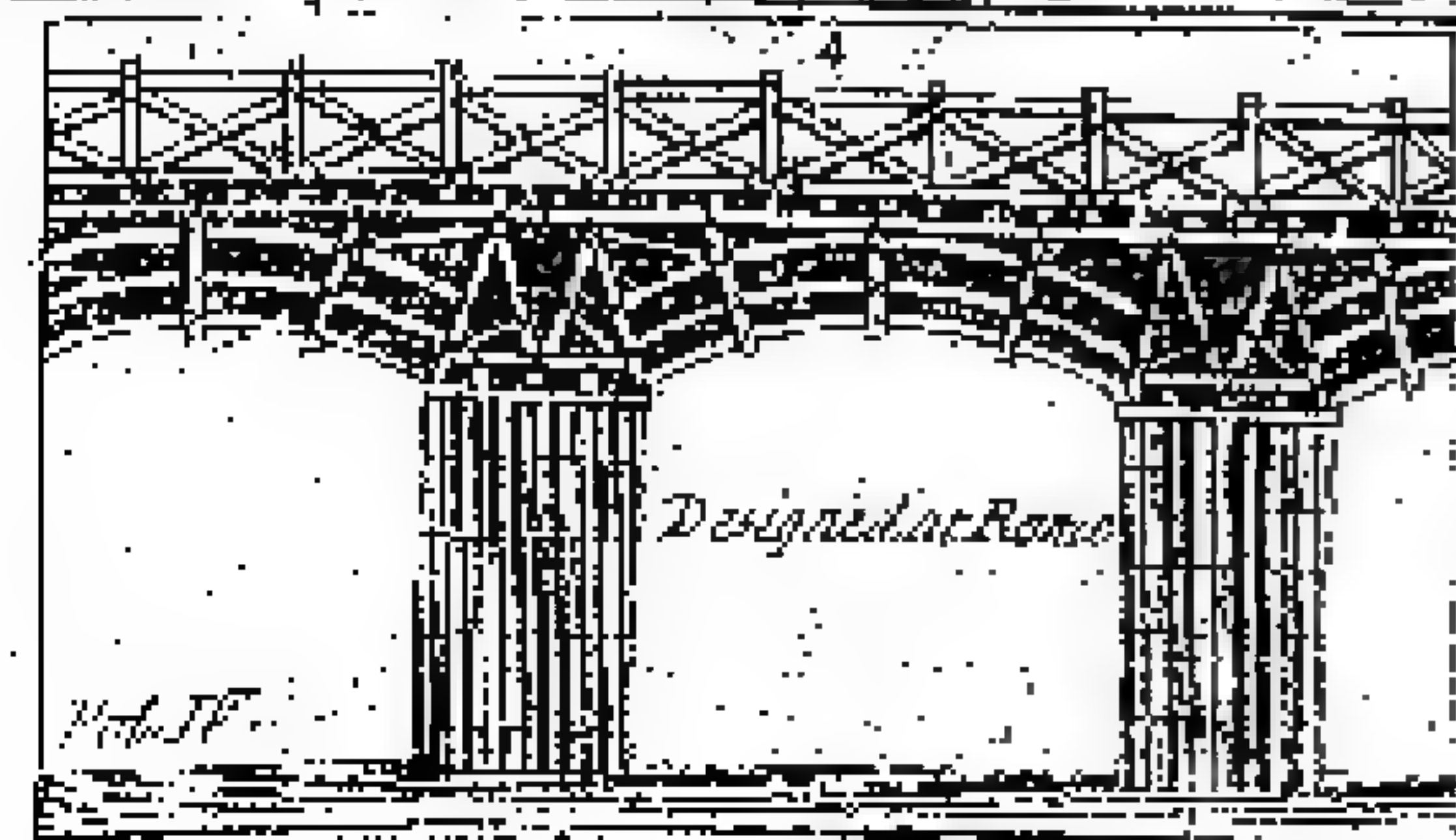
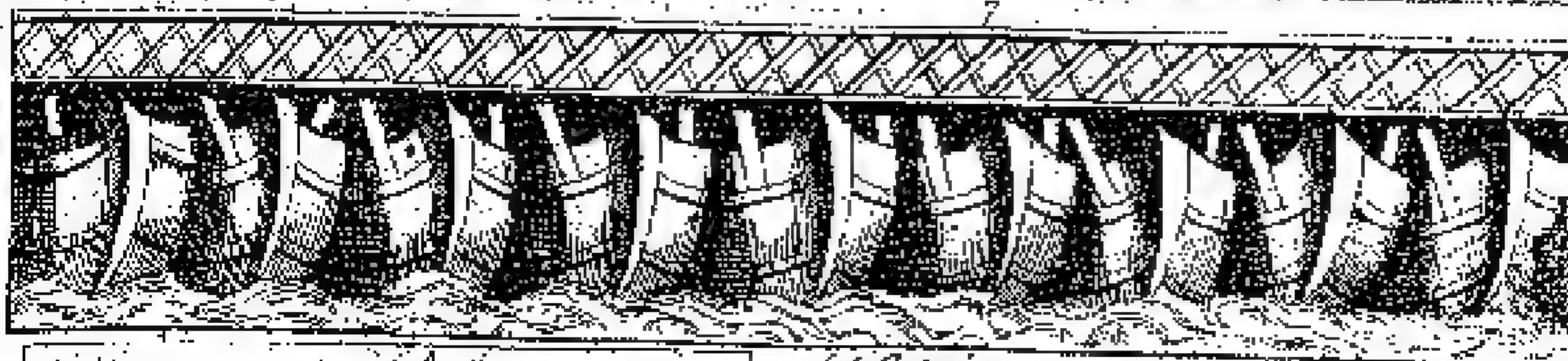
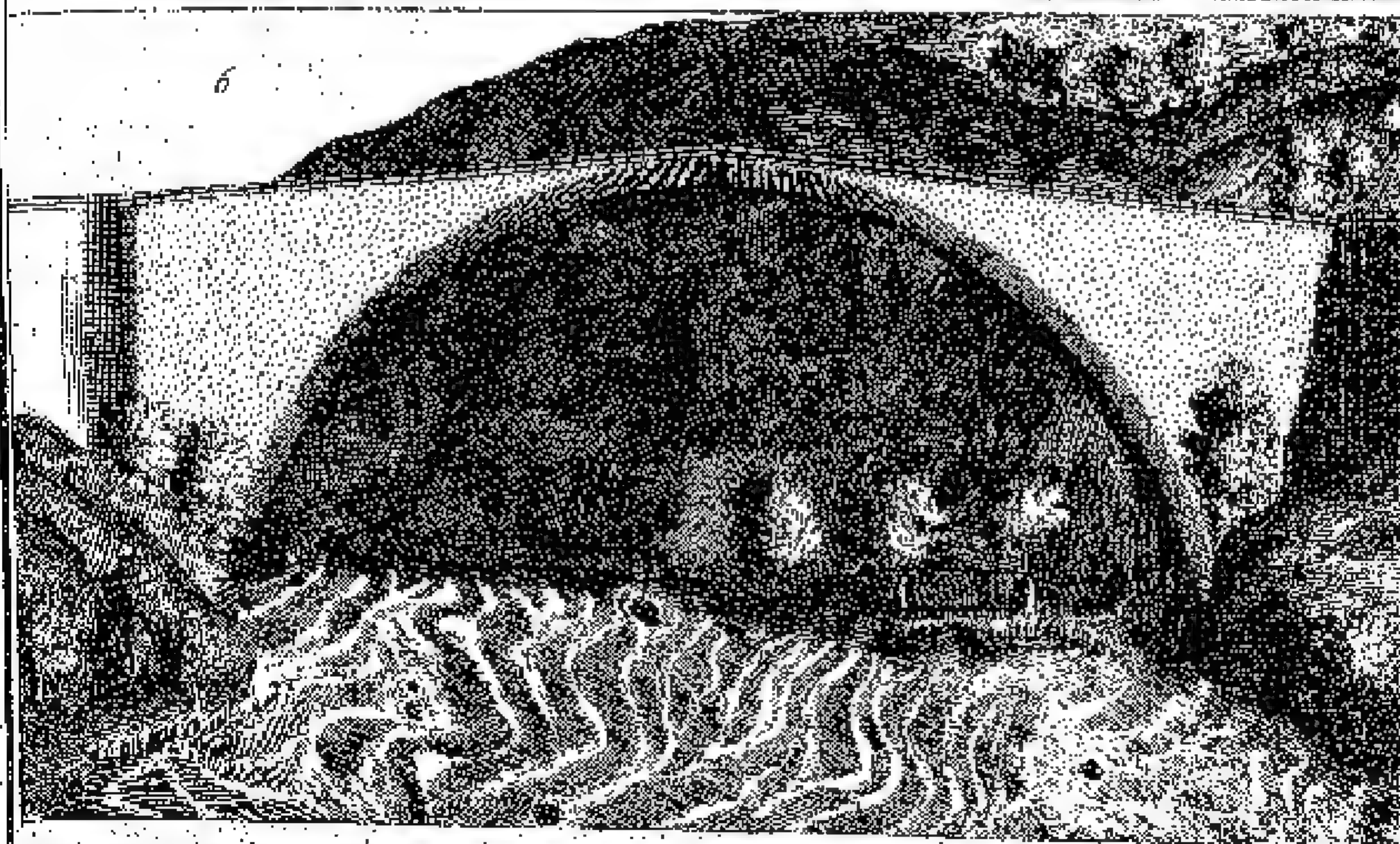
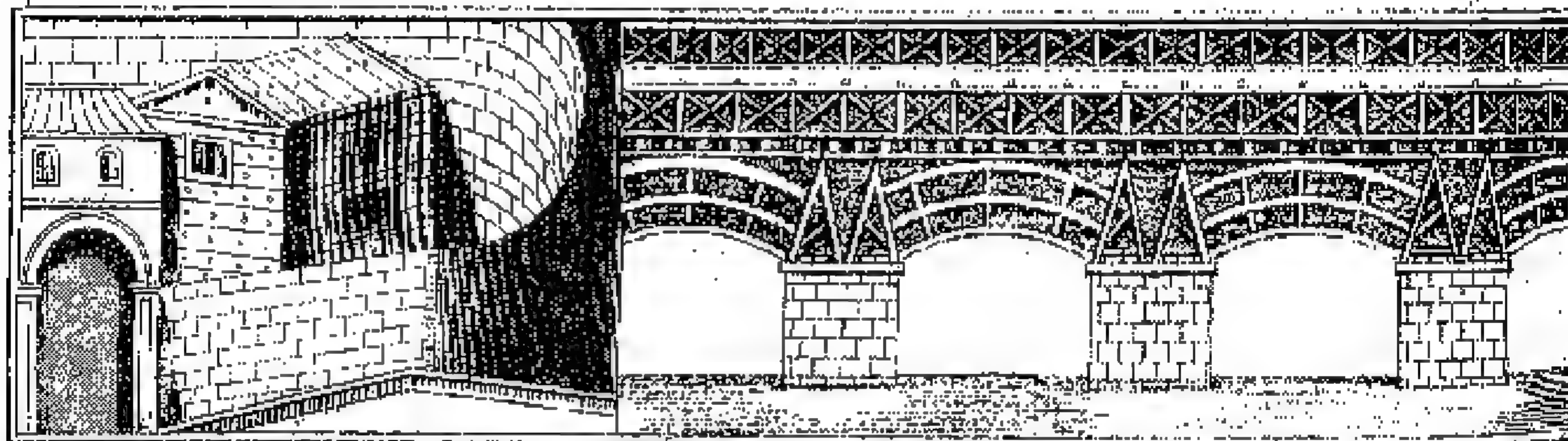
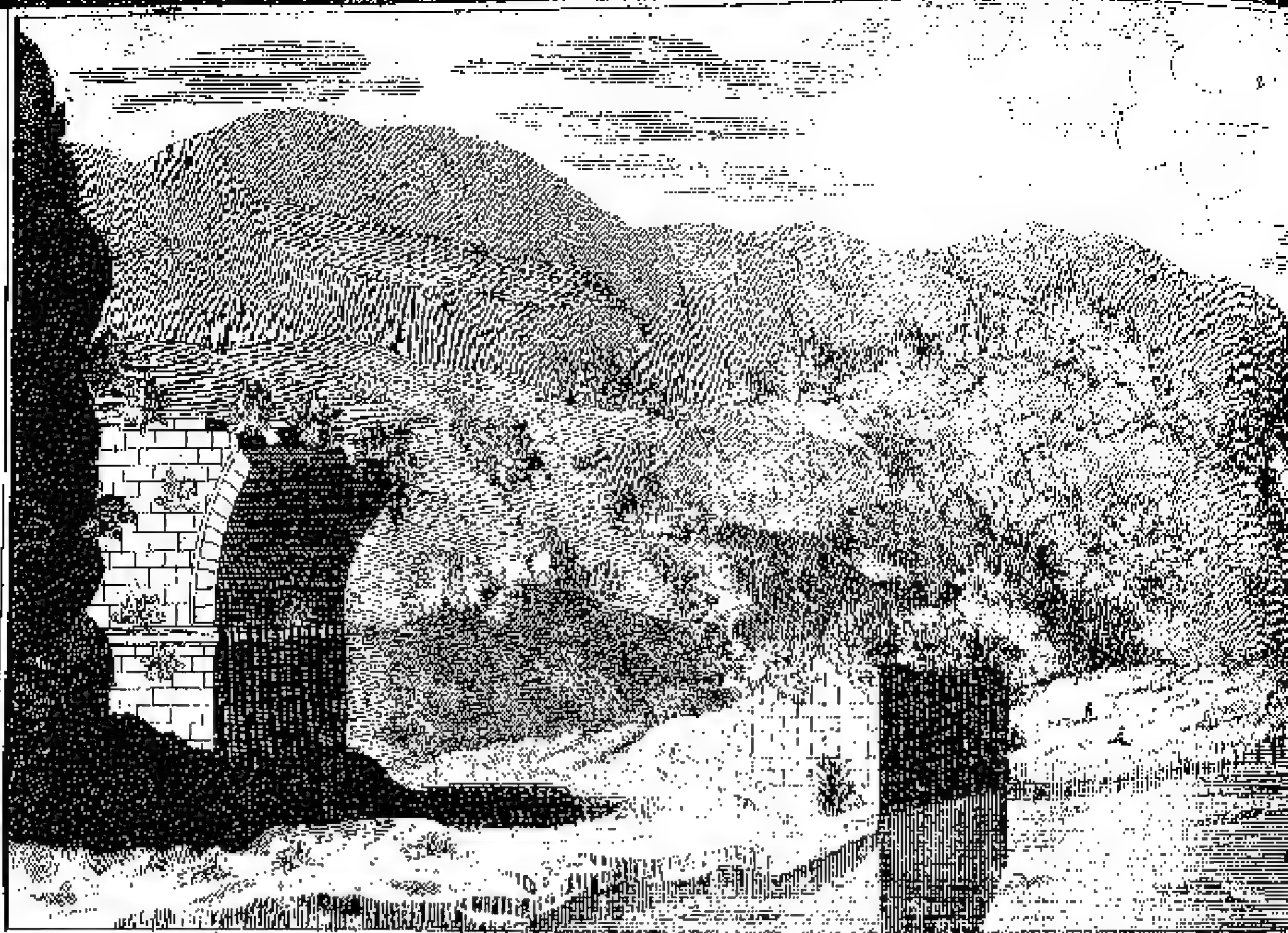
I. The Bridges of the Ancients. II. The Bridges of Rome. III. The wonderful Bridge of Narni. IV. That which is taken for the Bridge of Caligula at Puteoli, is a quite different thing.

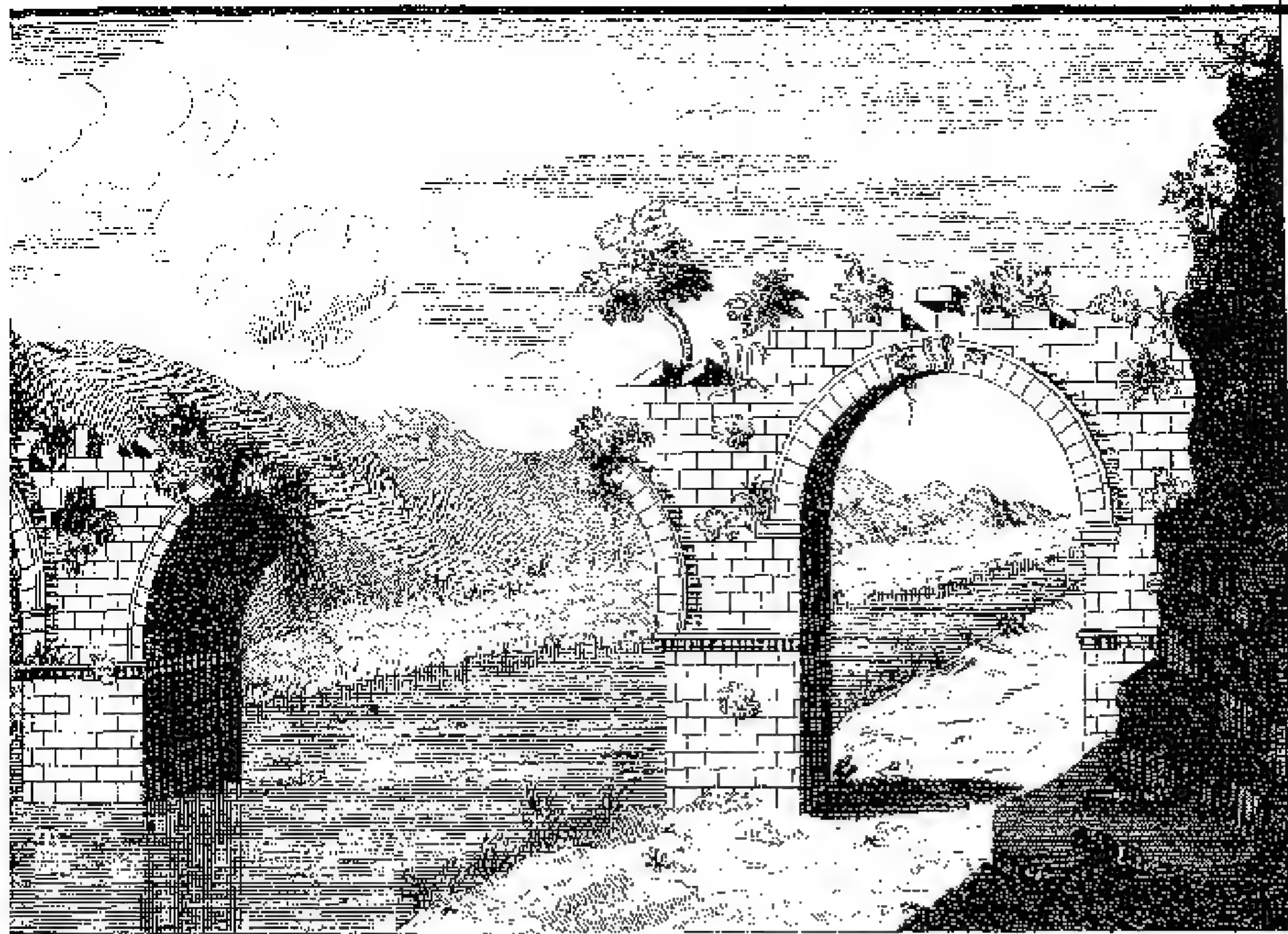
I. THE Bridges of the Ancients may be reckon'd among the principal Monuments of Antiquity: Of these many remain entire at this Day; the Inhabitants thereabouts being obliged to keep them in Repair, in order to preserve their Commerce with one another: This, however, did not hinder but that many have been ruin'd and broken down, either by Floods or other Accidents; some of which are quite demolish'd, and no Footsteps of them remaining, while others again have some Arches left standing, sufficient to give us a Notion of their Structure. The best of those that are preserv'd, are not all in *Italy*; but on the contrary, some of the most considerable are to be met with in other Countries.

II. The Bridges in *Rome* were anciently eight in number; namely the *Pons Fabricius*, which joins at this Day the greatest Part of the City with the Isle of *Tiber*; the *Pons Cestii* on the other side of the Isle, repair'd by the Emperors *Valentinian* and *Valens*; the *Pons Sublicius*, which was the first Bridge that was built at *Rome*, and so call'd, from its being made of Wood, but since built of Stone: Some Ruins of this are shewn at the Foot of Mount *Aventine*.

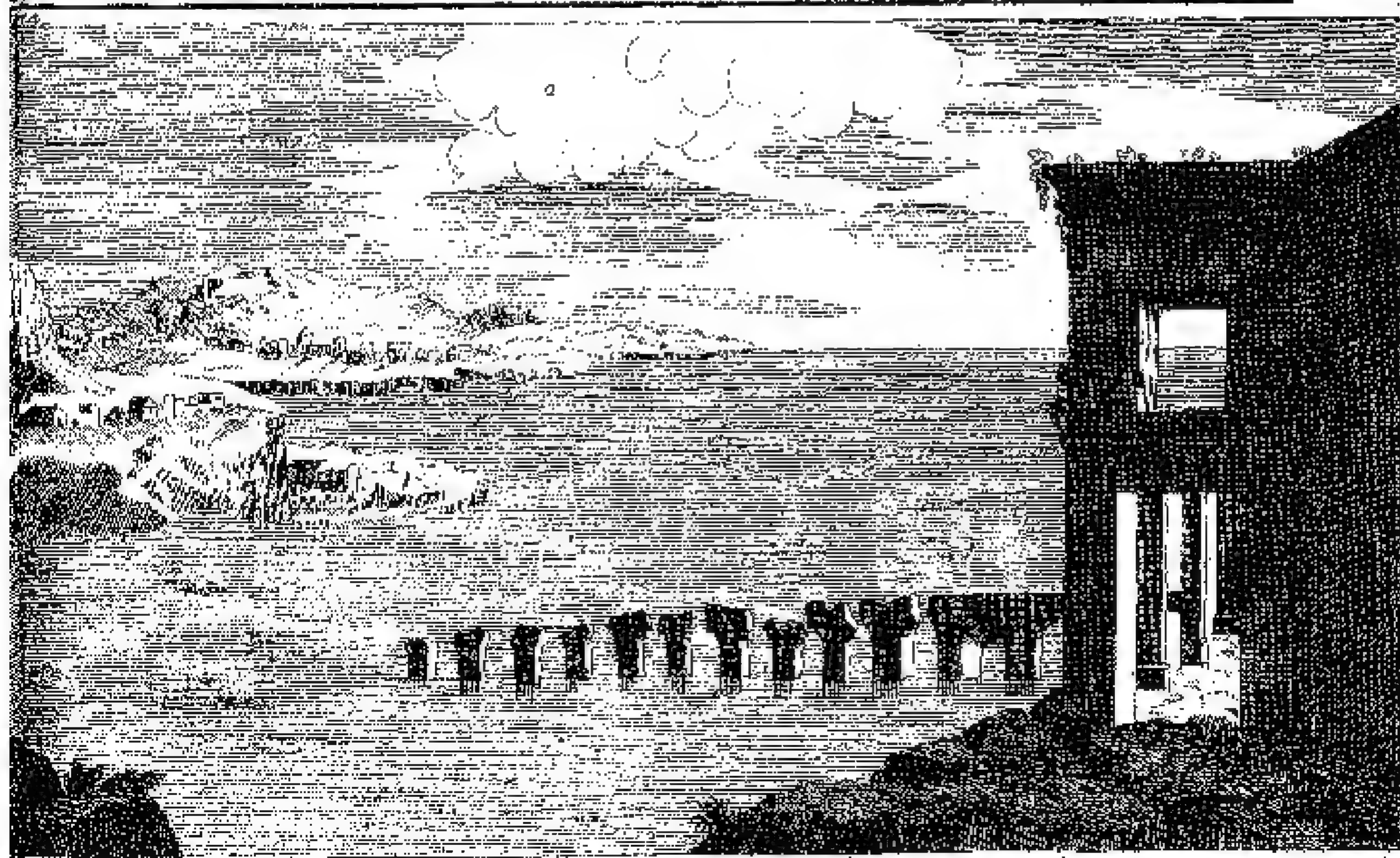
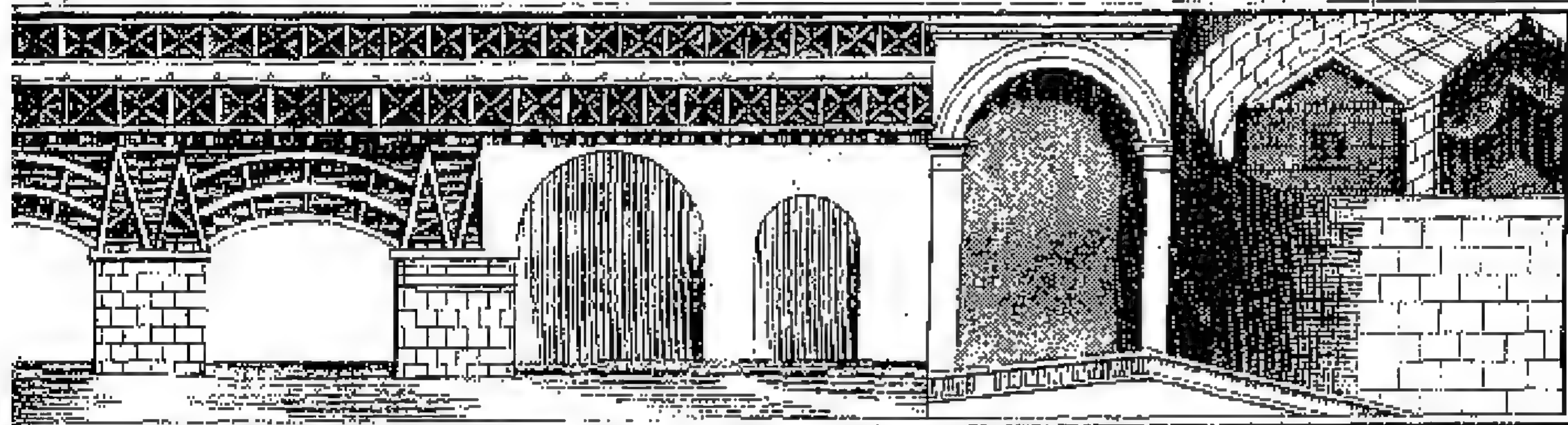
The *Pons Senatorius*, as it was call'd, was over-against *S. Mary the Egyptian*, some Arches of which are yet remaining: It was also call'd *Pons Palatinus*, from its being situated near Mount *Palatine*. It has often been destroy'd by Floods, and often been rebuilt; but since some Arches of it were carried away, which happen'd under *Clement VIII*, nothing has been done to it. The *Pons Janiculi*, so call'd from its being the way to the Mount of that Name, was rebuilt quite from the Foundations by *Sixtus IV*. There are also seen near the Hospital of the Holy Ghost the Ruins of a Bridge, call'd anciently *Pons Triumphalis*, because in their Triumphal Processions they went over it to go to the Capitol. Not far from thence is the Bridge *S. Angelo*, anciently call'd *Pons Ælius*, from its being built by the Emperor *Ælius Adrianus*: It was repair'd by Pope *Nicholas V*, and since adorn'd with Statues by *Clement IX*. Of these Bridges there's none but the last which is remarkable for its Breadth. Without the City there's the *Pons Milvius*, now call'd *Ponte Molle*; but it is considerable for nothing. There are also upon the *Teverone*, which was the *Anio* of the Ancients, some Bridges, the most considerable of which is that call'd the Bridge of *Narjes*.

III. As our Design is to exhibit none of the Bridges of the Ancients but such as were most remarkable, we shall therefore pass by all those above-mention'd to come to that of *Narni*, which is in the Road from *Loretto* to *Rome*. At the Foot of the Mountain upon which that City is situated, there is to be seen the old Bridge broken, by the Appearance of which it must have been very magnificent. We have here given the Reader the Form of it, together with its Dimensions,



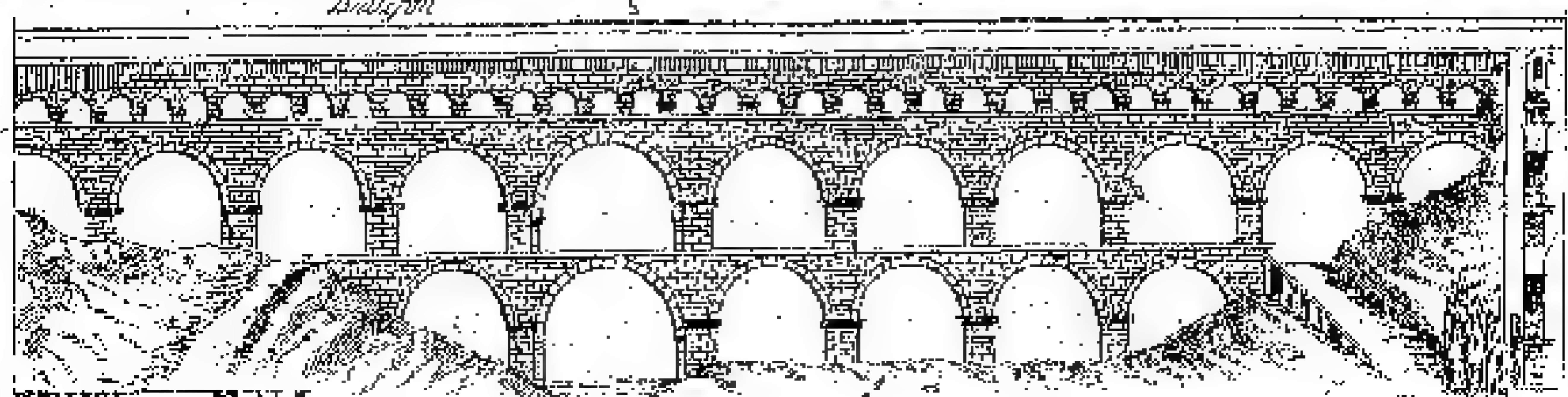
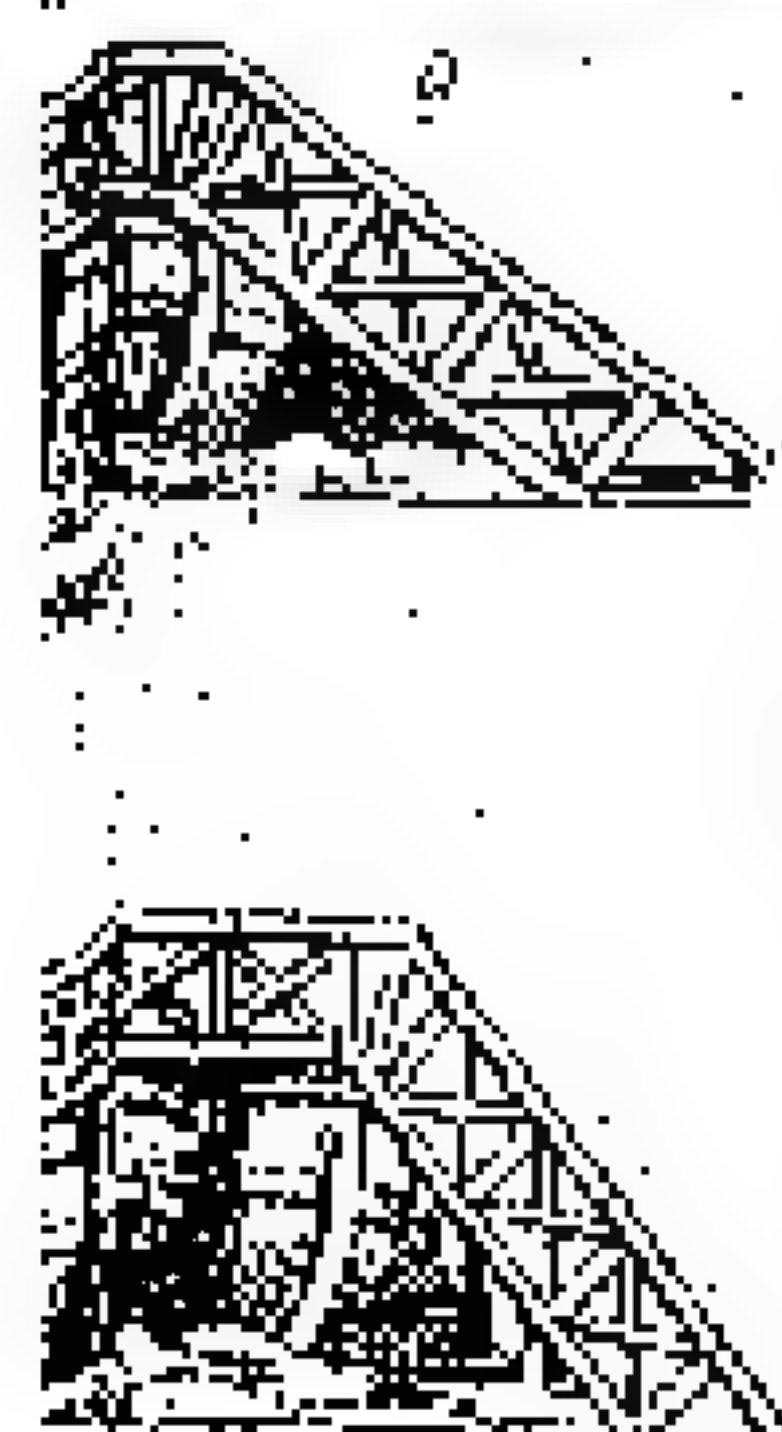


Rippon & Martonville



Bridgton

5



sions, as they were publish'd by *Agustino Martinelli*, in a little Book printed at Rome in the Year 1676, which is intitled *Descrittione de diversi Ponti effilanti sopra li fiumi Nera e Tevere*. This Bridge, which joins two opposite Mountains, between which the River *Nera* runs, is of a prodigious Height, and was thus built by *Augustus*, *Cluver* says, that the Inhabitants of *Narni* might go strait along from one Mountain to the other. The Bridge has four large Arches, but not of equal size. The whole Length of the Bridge from one Mountain to the other is eight hundred and fifty Palms, or six hundred thirty six *Roman Feet*, at the rate of three fourths of a *Roman Foot* to the Palm; which *Roman Foot* was equal to eleven *French Inches*; so that the Bridge was five hundred eighty three Foot long of the *French Measure*. According to this Computation it will be easy for the Reader to adjust the following Measures. Of the Arches, the first only is whole and entire, for all the rest are broken and impair'd more or less. This also, tho' the least of all, is a hundred Palms wide, and in height a hundred and fifty. The second is in breadth a hundred and eighty Palms or thereabouts from one Pile to the other: The third a hundred and fifty two; and the fourth, which reaches to the other Mountain, a hundred and ninety Palms. Now if these Measures of *Martinelli's* are just, this Bridge is astonishing, and the last Arch, according to him, must be a hundred and forty two *Roman Foot* from Pile to Pile, which is very extraordinary.

IV. There are yet at *Puteoli*, according to the common Opinion, some Piles and Arches of the Bridge begun by *Caligula*, which, had it been finish'd, had been considerable only for its Length. But this piece of Tradition is manifestly contradicted by *Suetonius*, who says that the Bridge built by that Emperor was a double Range of loaden'd Vessels fasten'd with their Anchors, upon which a Floor was laid for his Army to pass over from *Puteoli* to *Baia*. As to the Piles therefore that remain, it's evident they were never intended for a Bridge, from their not lying in a right Line, but wheeling rather towards the North. It must have been then, as some think, a Mole built by the *Greeks*, and since repair'd by *Antoninus Pius*, as the Inscription imports, which says that this Emperor rebuilt six Piles that had fallen, and that he had executed what his Predecessor, or his Father *Hadrian*, had promis'd.

IMP. CAESAR. DIVI HADRIANI FIL
DIVI. TRAJANI. PARTHICI. NEPOS
DIVI. NERVAE. PRONEPOS. T. AELIUS
HADRIANUS. ANTONINUS. AUG. PIUS
PONT. MAX. TRIB. POT. II. COS. II.
DESIG. III. OPUS. PILARUM. VI.

MARIS. CONLAPSUM. A. DIVO. PATRE. SUO. PROMISSUM RESTITUIT.

These Moles in form of Arches are thought to be better and more commodious than those built like a Wall, as being in less Danger of being broken by tempestuous Seas, and less subject to be fill'd with Sand, the Waves generally carrying it back with the Ebb-Tides; whereas when the Mole is a sort of continued Wall without Interruption, the Sand that's brought in with the Sea for the most part stays there. In this Mole there was one Arch larger than the rest, for the Ships to come in at. Another Proof that this was a Port, is, that on the side of the Piles there are great Stones bored through, to which the Vessels were fasten'd. There remain now only fourteen Piles of this Mole, which are partly Brick, and partly Stone, of a prodigious Size, and all the Arches are half ruin'd: We have, however,

- ² ever, given the Reader the Figure of this Mole² after M. *Antony Bulifon*, as he publish'd it in his Book entitled, *La Guide des Etrangers*, The Stranger's Guide, who liv'd many Years upon the Spot, and made these Observations above-mention'd.

CHAP. IV.

- I. The Bridge built over the Danube by Trajan very magnificent, according to Dion. II. Dion hath exaggerated the Matter; the true Form of the Bridge. III. Cæsar's Bridge over the Rhine.*

I. WITH regard to the Bridges out of *Italy*, there's nothing more magnificent than that of *Trajan* over the *Danube*, if we may depend on *Dion's* Description of it. 'This Bridge, he says, has twenty Piles, all of square free Stone; the Height of which is a hundred and fifty Foot, and their Breadth sixty: Their Distance from one to another is a hundred and seventy Foot, and over them are Arches built. Now tho' the Expence of building such a stately Bridge is almost incredible, yet what is still more to be admir'd is, that it is built in such a great River full of Windings, the Course of which could not be chang'd, and which has such a muddy slimy Bottom besides. Add to this, that the River, tho' in other Places it's like a Sea upon account of its Breadth, is more contracted and narrow in this Place, and the Course of it by consequence more rapid, which makes the building of this Bridge a yet more difficult Work. This, however, did not discourage *Trajan* from the Undertaking, but, on the contrary, he embraced the Occasion that it offer'd him, of shewing his Greatness of Soul. This Bridge is now of no Use, there being no more left of it than the Piles: Nor do these seem to be preserv'd for any other Reason, than to shew that there's nothing too great for the Mind of Man to attempt.' *Dion* adds, that *Hadrian* the Successor of *Trajan*, fearing this Bridge over the *Danube* might serve as well for the *Barbarians* to pass into the Territories of *Rome*, if once they could make themselves Masters of it, caus'd the upper part of it, together with the Arches, to be demolish'd; or it may be he did it out of Envy, as some think, as knowing he should never do any thing like it himself.

II. Thus is *Dion's* Testimony as positive as can be, so that if Credit may be given to him, it must be own'd there never was a Bridge like it. But it happens that *Trajan's* Pillar does not agree with this Description: For the Bridge is there represented after the manner of all the other Buildings of the *Romans* in those Parts: That is, it appears to have no more than two small Stone-Arches at one of the Extremities, all the rest of the Bridge being Wood-work, with curious Arches of the same, but supported by Piles of Stone. Thus does this Bridge agree with *Dion's* Description in nothing but this, that the Piles are built of large square Stones. But to make this Structure better understood, both with regard to the Piles and the Wood-work, I have here first exhibited the Bridge³ as it was represented in *Trajan's* Pillar, publish'd at *Rome*, and then two Piles of it⁴ with the wooden Arches, as *Philip Raffeur*, then Procurator-General of our Congregation in the Court of *Rome*, got them design'd for me with great Exactness. Besides all this, I sent to Count *Marsigli*, who formerly had considerable Commissions in the Emperor's Army in *Hungary*, to desire the

the Favour of some Remarks of his, which I knew he had made upon the Place, who accordingly did me the Honour of the following Account. The Piles of the Bridge, says he, remain yet, but can never have been strong enough to support such large Arches of Stone: And this appears also in *Trajan's* Pillar, where those Piles seem not to have been design'd to sustain Stone Arches. Moreover, can any one think the *Romans* would have neglected to have represented so magnificent a Bridge upon *Trajan's* Pillar, in the maner it was built? That is, can it be imagin'd they would represent it so much to its Disadvantage, as to shew it to be no more than a Bridge of Wood sustain'd by Piles, and by consequence inferior to the most common Stone-Bridges? The *Danube*, continues he, is in this place an *Italian* Mile broad, and is so shallow in Summer, that nothing was easier than to build Stone Piles, especially in a place where Materials are so plentiful. The same Count at the end of his Letter adds, that the Bridge of the Holy Ghost upon the *Rhine* is a Work by far more wonderful than this Bridge over the *Danube*.

III. From this Bridge over the *Danube* we come to that built over the *Rhine* by *Julius Caesar*, the Description of which he has given us in his Commentaries, which take as follows. ' Having join'd two pieces of Timber, a Foot and a half square, by Mortices that kept them at two Foot distance from each other, he cut them to a Length proportioned to the Depth of the River; then making them sharp at the end, caus'd them to be let down into the Water with Engines, and driven fast down into the bottom, not perpendicularly, but a little sloping, in compliance with the Stream: Directly opposite to these he plac'd two other Stakes, join'd just after the same manner, and drove them into the Ground at forty Foot distance from the other at the bottom, causing the tops to incline towards the Stream, as the other had declin'd from it. These double Stakes thus fix'd, he join'd at the top by a cross Beam of two Foot square, fasten'd by two Pegs, and tied with Cords at each end, which prevented them from bending nearer one another, and made the Work of so secure a Nature, that the Fierceness of the Stream encreas'd the Firmness of the Bridge. Having observ'd the same Method quite over the River, he cover'd the cross Beams with Planks and Hurdles; then having supported the Arches of his Bridge below with Butteresses, driven obliquely into the Water, and fixt at the top to the main Pillars, so as to sustain them against the Force of the Current, he likewise drove in other Piles at a moderate Distance above the Bridge, to stave off Trunks of Trees, and such Vessels as the Enemy should send down the River to destroy the Work. Thus was the whole Bridge finish'd, and that in ten Days time, from the bringing the first Materials for the Work.

From this Description of *Cæsar's* many have attempted to give us the Form of this Bridge; but no two ever agreed therein, so that I thought it altogether as well to give no Image of it: For the Diversity of Opinions concerning it abundantly shews the Difficulty, if not the Impossibility of exhibiting it truly.



CHAP. V.

I. *The Bridge at Gard with three Rows of Arches.* II. *The Bridge of old Brioude of one Arch only.* III. *The wonderful Bridge of Alcantara.* IV. *Bridges made of Boats.* V. *Bridges made of Tubs.*

- 5 I. **T**HE Bridge at *Gard*, three Leagues from *Nismes*, serv'd at the same time for an Aqueduct to convey the Water to *Nismes*. Whether it was made at first for both these Purposes, I shall not stay to examine; tho' some are of Opinion it was, and others, that the Bridge was built upon the first Row of Arches in later Ages. But be that as it will, it is one of the most beautiful Monuments of *Roman* Magnificence. The first and lowest Range of six Arches serves at once for the Bridge and for the Foundation of the upper Arches, so that the lower Piles are continued upwards: The Piles therefore of the second Range of Arches have their Foundation in the Piles of the first Range, yet so as to leave a free Passage between them. The second Row of Arches is continued upon the Acclivity of the two Mountains, between which the River *Gard* passes, and consists of no less than eleven, all higher than the first Range. Above this second there is still a third Range of five and thirty Arches, but far less than the two other Ranges, upon the top of which is a Canal of Water as high as the Tops of the two Mountains, so that the Water passes from one Mountain to the other, and is convey'd to *Nismes* by an Aqueduct, the Arches of which remain to this Day in certain Places, and those not a few. This wonderful Bridge was built of Stone of a prodigious Size, join'd together not only with Cement, but with Binders of Iron; some of these Stones are found to be full twenty Foot long; and *Poldo d'Albenas*, in his Description of the Antiquities of *Nismes*, has given the Dimensions of others. That Author says the first Row of Arches is 438 Foot long; the second 746, and the third and highest 805. And that the height of all three from the Channel is 182 Foot; tho' others make it not so much. But however it be, it's certainly one of the most stately Works that Antiquity has transmitted to us.
- 6 II. The Bridge of old *Brioude* is a Work of earliest Antiquity, and gave Name to that City, which Name also pass'd to the new City: For *Briva* in the old *Gaulish* Language signifies a Bridge, from whence came *Brivas*, and thence again *Brioude*, as called at this Day. This Bridge has but one Arch, under which runs the whole River *Allier*. The Arch is made of two Rows of square Stone, and other small Stones and Rubbish cemented together. The two sides of the Arch are founded upon a Rock, which is the Reason that the beginning of the Arch on one side is higher than that on the other, the Situation of the Rock not permitting it to be otherways. The Breadth of the Arch from one Pile to the other, is a hundred ninety five Foot, which is such a Breadth as I do not remember ever to have heard of, and its Height from the Water eighty four Foot. The Breadth of the Bridge is only fourteen Foot, which is just the thickness of the Wall on each side. But I have here given the Reader the Figure of it, as the Design was taken for me upon the place. 'Tis observable that two Men at the bottom of the Arch on each side, hear one another distinctly, tho' they speak with a low Voice: The same thing is also observable in other places, tho' not altogether at such a Distance.
- III. The Bridge of *Alcantara* is also another Work of *Roman* Grandeur and Magnificence, and as we are told by those that have seen it, is indeed a most wonderful Structure. 'Twas built by the Emperor *Trajan* over the River *Tago*, or, as a certain Inscription imports, by some Praefect of that Country in Honour of

of *Trajan*. I have us'd all possible Means to procure a Plan of this Bridge, but to no purpose: The late M. *de Langlade*, the Queen of *Spain's* Physician, and my very good Friend, took also no small Pains to get it done; but all in vain, by reason of the want of Persons in those Parts that are skill'd in Drawings. This Bridge is six hundred and seventy Foot long, and consists of six Arches, each of which is eighty four Foot broad from one Pile to the other: The Piles are four-square, and seven or eight and twenty Foot broad on each side. The Breadth of the Bridge is eight and twenty Foot, and its Height from the Water two hundred; in which last Particular it exceeds all the Bridges we have taken notice of.

IV. Bridges of Boats were very much in Use among the *Romans*, who, that they might never be at a loss for such Bridges, were always provided with these Boats, and convey'd them from place to place upon Carriages, as we shall see below in one of the Chapters of Carriages. The Bridges of this sort here exhibited, were taken from the Columns of *Trajan* and *Antonine*; and consist one of nine Boats⁷, another of five⁸, and two more of four⁹. These Boats are fasten'd close to each other, without the least space between them, by which means the Bridge sunk the less in the Water. 7, 8, 9

V. In Cases of Necessity the *Romans* made Bridges of empty Tubs, as the Emperor *Maximilian* did, according to *Herodian*. Others also made them of Leathern Bottles, as we are told by *Zosimus* the *Romans* did, at their Return from their unhappy Expedition against the *Persians* under *Julian* the Apostate.

CHAP. VI.

I. The various Names of Chariots, and other Carriages. II. What the Thenfa and Carpentum were. III. What the Carruca. IV. Several other Names of Chariots and Carriages.

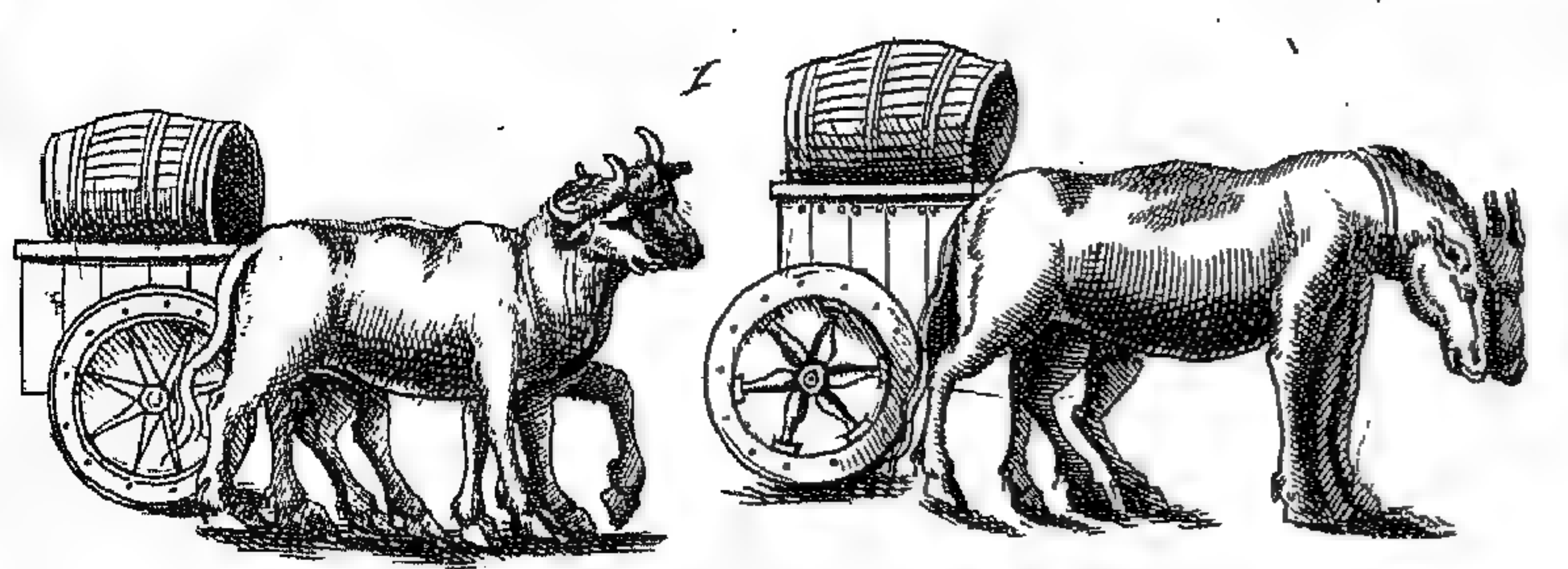
I SHALL make no Stay to enquire after the Author or Inventor of Chariots and other Carriages of that kind; because we know for certain they were in use among the *Egyptians* in the Days of *Jacob* and *Joseph*. Mythologists attribute the Invention of them to *Vulcan*, *Minerva* and others; but these fabulous Origins deserve no regard. We will therefore examine the thing it self, and herein shall content our selves with what ancient Monuments have left us. The Greeks call'd their Carts and Chariots by the Names of *ἄρμα*, *ἀμαξα*, and *ὄχημα*: The *Latins* by those of *Currus* and *Carrus*, which seem to be general Names, and to comprehend all the several Species of Vehicles with Wheels. By the *Currus* may be understood either Cart, Coach, Chariot, Chaise, or any other Vehicle moving upon Wheels, which was also call'd by the several Names of *Bigæ*, *Trigæ*, or *Quadrigæ*, according to the number of Horses to draw them: For the *Bigæ* were drawn by two, the *Trigæ* by three, and the *Quadrigæ* by four Horses. But besides these they had also their *Sejuges* or Chariots and six, and their *Septijugæ* drawn by seven Horses, and sometimes their Chariots and ten, all in front, one of which we have seen above: But all these of six, seven and ten Horses in front, were in my Opinion never us'd but in the *Circi* and in Triumphs. The Chariot with two Wheels was call'd *Birotum*, or *Birota*, which is what the Words import.

II. The *Thensæ* were Chariots or Waggon in which they carried the Images and Statues of their Gods at the *Circensian* or other Processions; besides which they were also the triumphal Chariots of Emperors and others. The *Carpentum* was a Chariot which serv'd for many Purposes; but was most commonly us'd to carry Matrons in, and in the Times of the Emperors to carry their Wives and Daughters: It was drawn by Mules, and had only two Wheels, tho' some say nevertheless that it had four sometimes. Nor was this Vehicle appropriated solely to the Use of Women: For *Florus* tells us that a certain *Gaulish* King call'd *Bituitus*, was led in Triumph in a silver *Carpentum*, which was the same he had fought in. White Horses and Mules were most in Esteem, and what the People of Fashion generally had in their Chariots, according to *Lucian*. The Emperors also us'd them, as we are inform'd by *S. Chrysostom*, and rode in Chariots of Gold, as the same Author adds. *Philostratus* likewise says that *Trajan* rode in a Chariot of Gold; and so says *Spartian* of *Elagabalus*, adding withal that he was drawn by naked Women.

III. The *Carruca* was also a Chariot made use of for the most part by People of Quality: This was a four-wheel'd Vehicle, drawn commonly by Mules, and, according to *Pliny*, adorn'd with Silver. The Custom however of imbellishing them with Silver was among the Quality only; the People of inferiour Rank adorning them with Copper or Brass. But this Custom was not uniform: For tho' the Emperor *Alexander Severus* allow'd Senators only to ride in *Carrucæ* enrich'd with Silver, yet the Emperor *Aurelian* (*Vopiscus* tells us) permitted the Use of them to private Persons. Some also, according to *Ammianus Marcellinus*, took a Pride in being drawn in *Carrucæ* that were higher than the ordinary Size, and to shine in rich and pompous Habits.

IV. The *Pilentum* was a Chariot with four Wheels, and most commonly us'd by Women. The *Petoritum* was the same thing with the *Pilentum*: The Word indeed is *Gaulish*, and *Varro* refutes those that would have it to be *Greek*. The *Rbeda* was also a four-wheel'd Chariot, and made use of as our Coaches are at this Day: It was drawn by eight or ten Horses, but most commonly by the same number of Mules, which were yok'd two and two, and never put singly one after another: The Word *Rbeda*, according to *Quintilian*, is *Gaulish*. What they call'd *Covinus* was a Chariot, made use of by the *Gauls* in the Wars, with Siches fasten'd to the Axel-tree, of which sort mention has been already made: They also made use of them for other Purposes without Siches. Most of the Names of Waggon and Chariots were of *Gaulish* Origin, and from thence pass'd into the *Latin* Tongue. *Benna* is also a *Celtick* or *Gaulish* Word, and signified a Chariot or Waggon cover'd with Osier; and from thence came the Word *Combennones*, given to those that travell'd in that Vehicle.

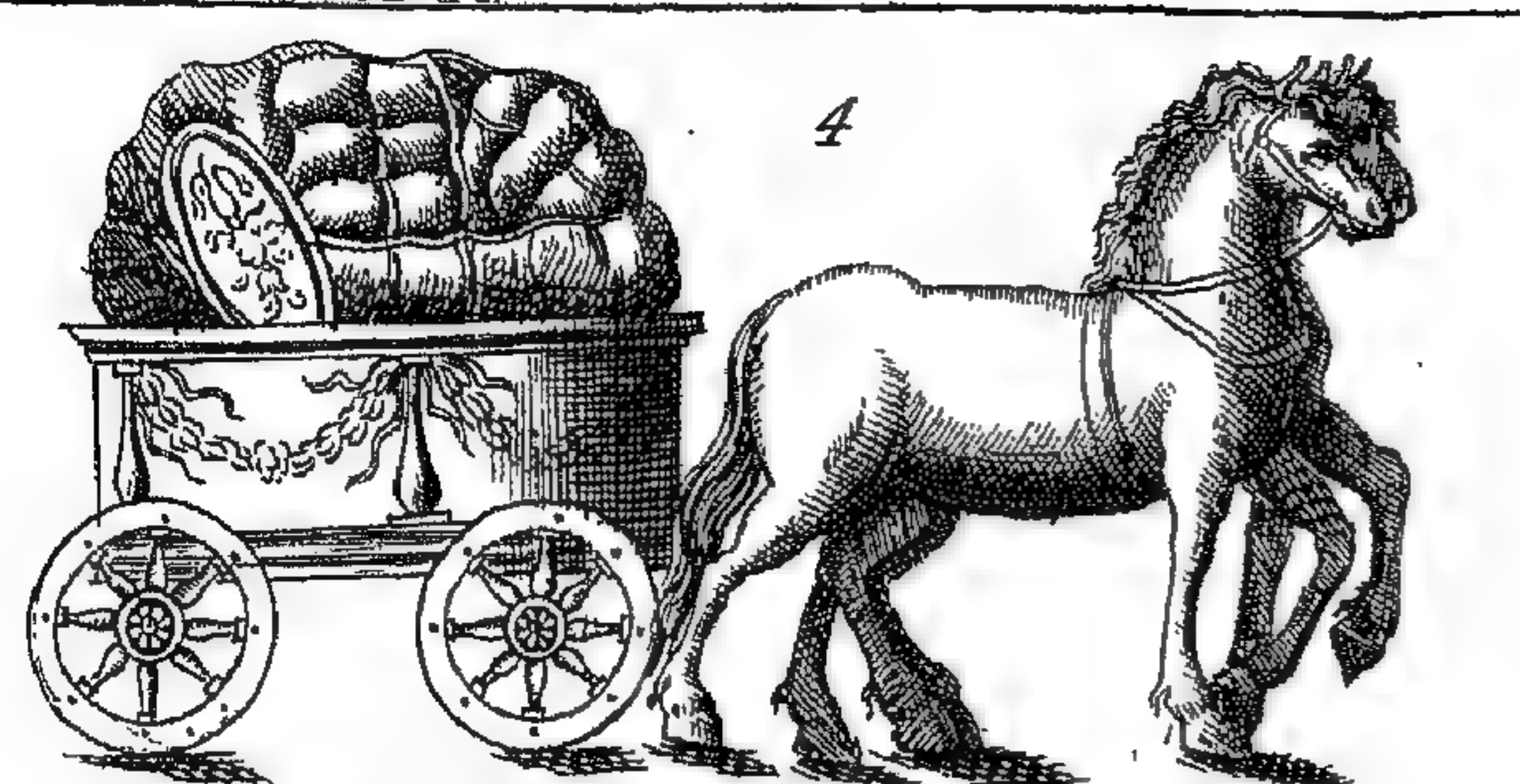
The *Serracum*, according to *Juvenal* and *S. Jerom*, was also a *Gaulish* Vehicle; but what the Form of it was we are altogether ignorant. The *Cisium* was a very light kind of Chariot with two Wheels, in which they put a wooden Chest or Wicker-Basket for the Passengers to sit upon: It was drawn by three Mules, and was the Vehicle us'd for Expedition. The Authors that take notice of this Carriage, speak of it as us'd by Men only, and never by Women. The *Essedum* was also a *Gaulish* or *Belgick* Chariot, made use of likewise in *Great Britain*, and fought in by the People of that Country, as we learn from *Cæsar*, who takes notice of the *Essedarii Britanni*. This *Essedum*, call'd also by the feminine Gender *Esseda*, was arm'd with the Siches upon the Axel-tree, like the other *Gaulish* Chariots mention'd before: They were also drawn by two Mules, or two Horses, not yok'd together, but put one behind another. Nor did they only make use of them in War, but also at their publick Sports and Races. The *Romans* likewise had them even before *Cæsar's* time.



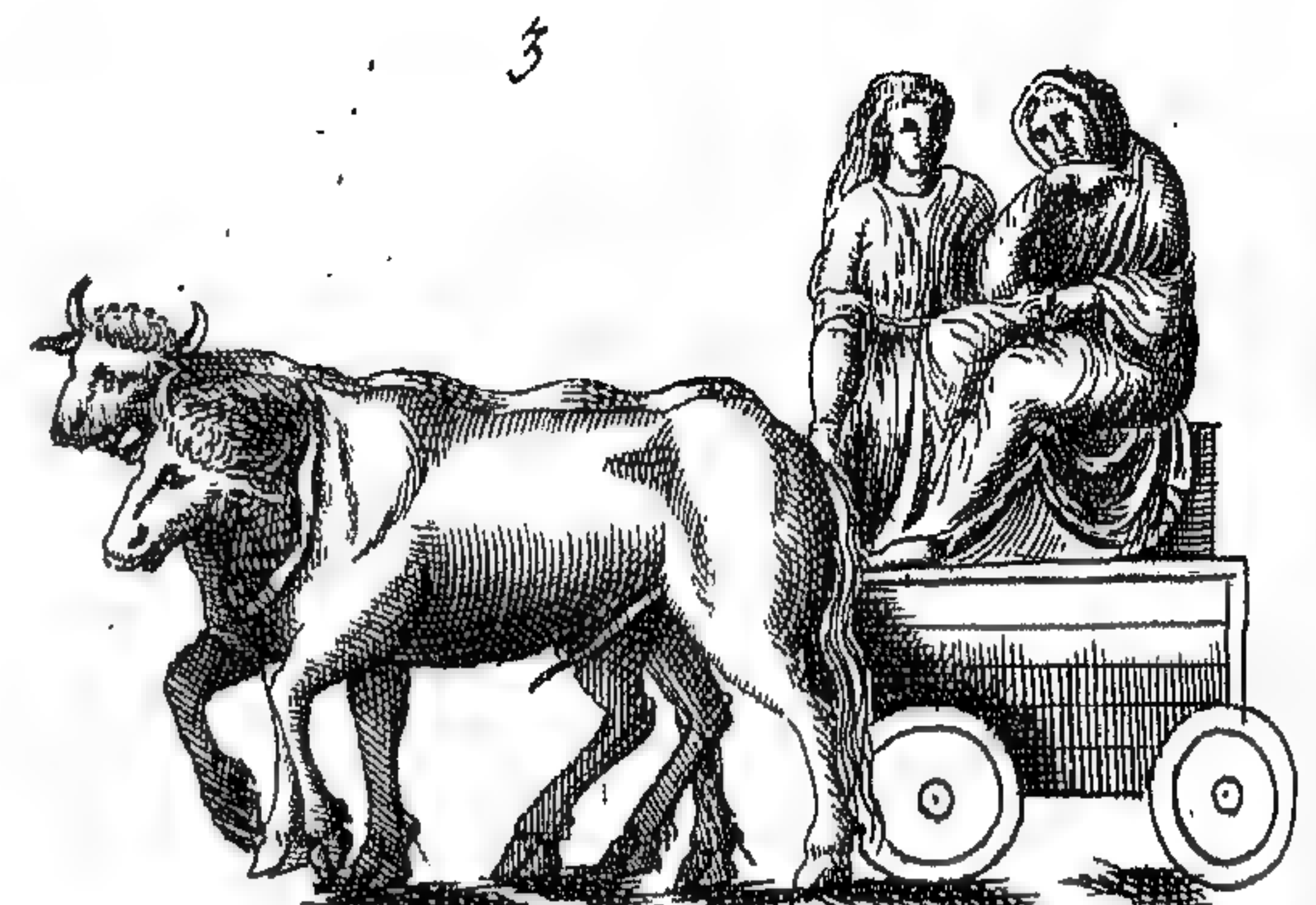
Antonine's Pillar



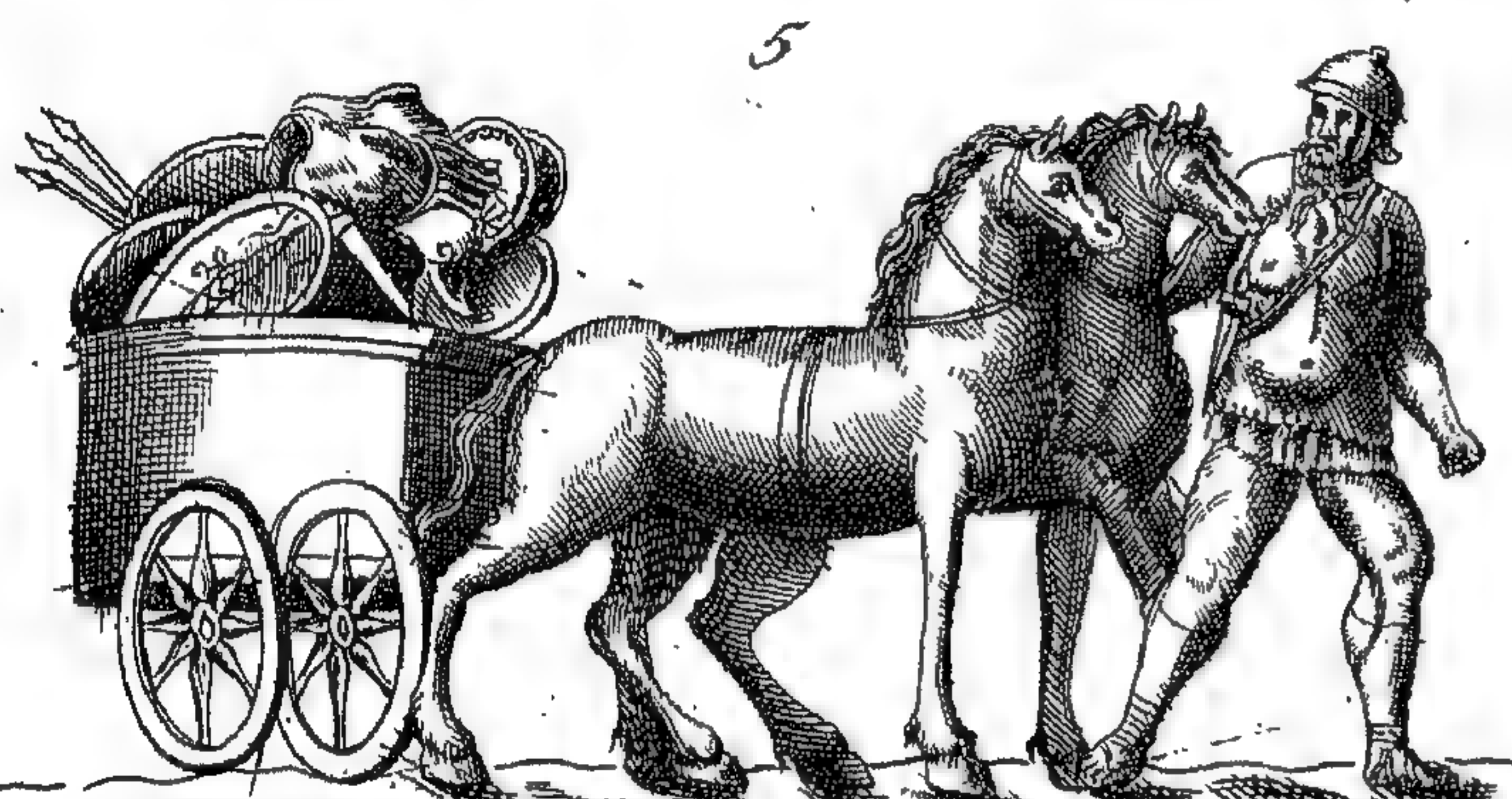
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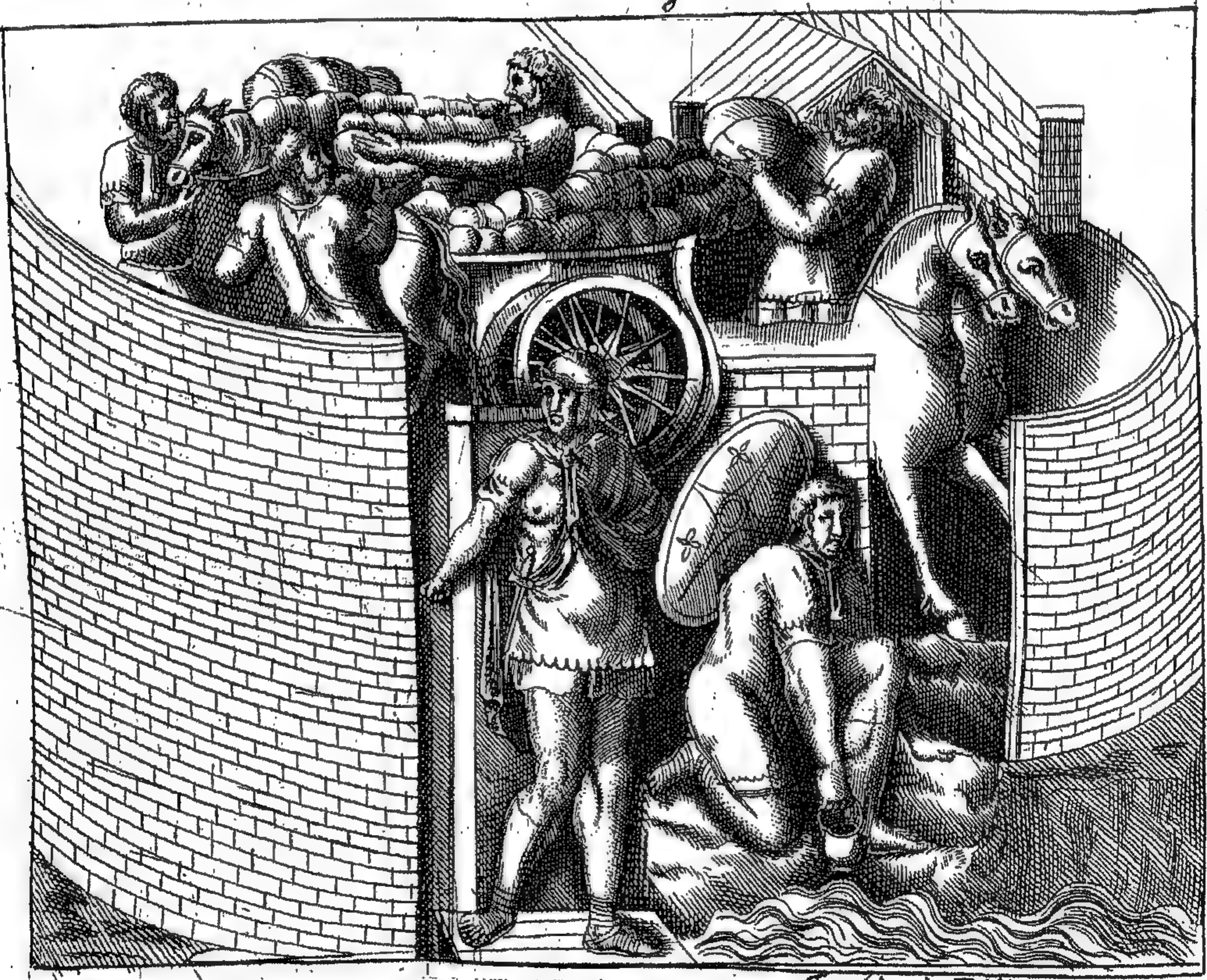
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Antonine's Pillar



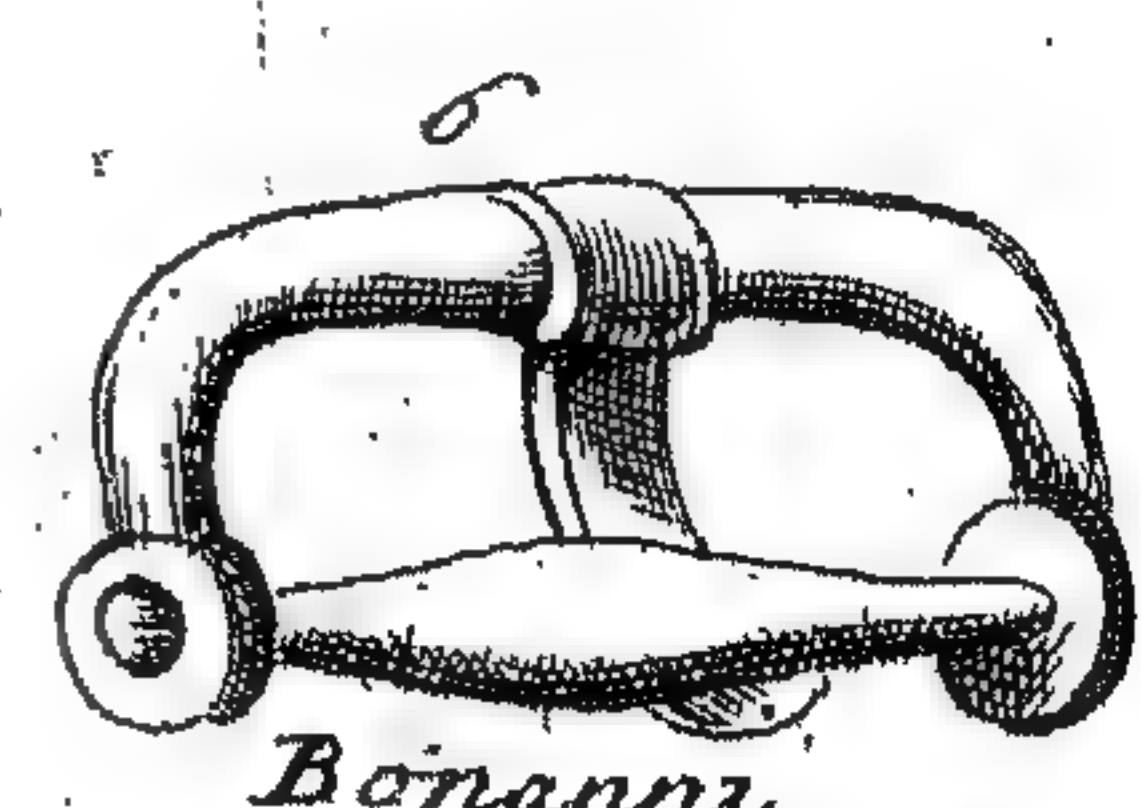
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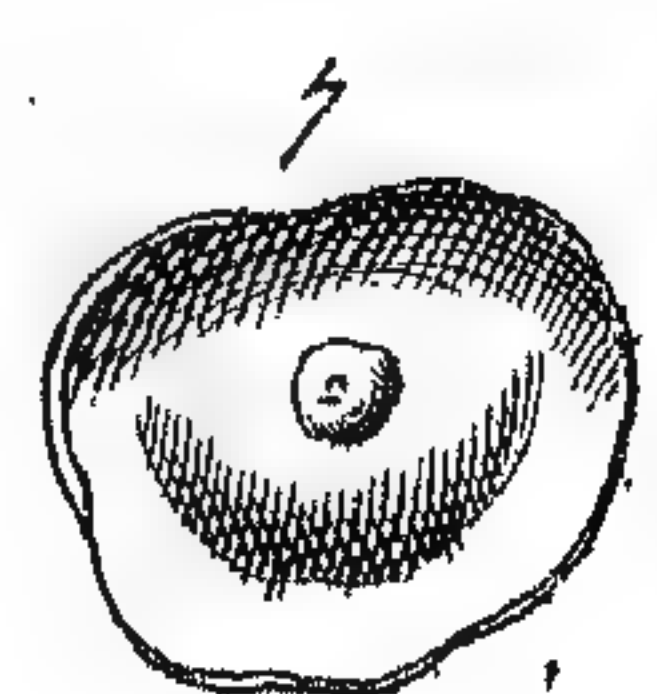
Trajan's Pillar



Trajan's Pillar



Bonanni



Bonanni

Vol. IV.

C H A P. VII.

I. *A Passage of Pliny concerning the Ornaments of Chariots and Carriages.* II. *The Figure of the Plaustrum. Wheel-barrows.* III. *Other Chariots.* IV. *Chariots with four Wheels.*

I. **P**LINY takes notice of the Ornaments us'd about the *Effeda*, and the *Vehicula Petorita*: His Words are these: 'They have a way of enamelling 'Brass, found out by the *Gauls*, which gives it such a Colour, that it can hardly 'be distinguish'd from Silver. They afterwards introduc'd the Use of Silver at '*Alexia*, especially in the Harness of their Horses and other Beasts us'd in drawing their Chariots: But as to other Inventions, the Honour of them was due to 'the *Bituriges*. After that they began to adorn their Chariots call'd *Effeda*, 'their *Vehicula* and *Petorita*, with such sort of Ornaments: Nay, not content 'with that, their Extravagance carried them even to gild them. It was formerly 'look'd upon as a very strange thing to see Cups and other Vases adorn'd in this 'manner; but now it's reckon'd no more than a piece of Politeness to have their 'Chariots enrich'd with it.

II. What they call'd *Plaustrum* was properly a Waggon or Cart, which sometimes had four Wheels and sometimes two, and was of the same Use with our Waggon at this Day. What *Cato* call *Plaustrum majus*, is thought to have been one of the four wheel'd sort, or Waggon.

The Ancients had also a sort of small Vehicle with one Wheel, the same with our Wheel-barrows, invented, as *Hyginus* tells us, by *Triptolemus*: These probably were made use of for carrying little Loads, as at this Day.

From what has been said of Chariots, Waggon and other Vehicles of that kind, and from their particular Names, it will not be easy to find out the Difference of their Forms. We have, however, already seen the Form of the *Thensa*, among the Triumphs, and therefore shall not here repeat it, but proceed to exhibit the other sorts of Vehicles with Wheels, transmitted to us from Antiquity. Of these the first we present the Reader with are two Carriages loaded with PLATE Wines', taken from the Column of *Antoninus*, one of which is drawn by two XL. Mules, and the other by two Oxen; and both probably what they call'd the ¹ *Plaustra*.

III. The following Carriage² taken from the same Column, is drawn by two ² Horses, has four Wheels without Spokes, and is probably what they call'd the *Plaustrum majus*, or Waggon. The Arms it is loaden with, namely, the Shields, Cuirasses, Swords and Pikes, may be observ'd to be rang'd artificially and with Symmetry, as *Plutarch* takes notice in speaking of the Triumph of *Paulus Æmilius*.

In the following Carriage, taken also from the same Column, there sits a captive Woman³ upon a Seat a little rais'd; which Seat is probably what they call'd ³ the *Capsum* or *Capsa*, and was indeed in the Shape of a small Chest. We shall see such another below. The Wheels of this Carriage are also solid and without Spokes.

IV. The following Carriage⁴ drawn by two Horses, is more adorn'd than the ⁴ former: It has four Wheels with Spokes like ours at this Day, and not solid after the manner of the preceding ones. These Carriages with four Wheels, *Pliny* says, were invented by the *Phrygians*. The loading of this seems to be Helmets

enclos'd in a Net; besides which there is a Buckler seen of an oval Figure. The
 5 next below^s is not unlike the last, tho' not so much adorn'd, and is loaded with
 Arms, as Helmets, Cuirasses, Shields, Pikes and Swords. At the bottom of the
 6 Plate there's a large Buckle^e, thought to have belong'd to some Carriage, and a
 7 round Piece of something, which resembles the Head of a great Nail^r.

8 In the following Image^s, some Soldiers in a Camp built of Free-stone, are load-
 ing several Waggon's with Sacks of Corn, which Waggon's are drawn by Mules.
 9 In the next Image^s, two Carriages, one drawn by Mules, and the other by Oxen,
 are each of them loaded with two Hog'sheads or other Vessels. From one of
 these Carriages there rise up certain Stays, which sustain the Vessels in the Air.

PLATE
 XLI. The Figure of the *Carpentum*, or Carriage with two Wheels drawn by two
 Mules, occurs in some Medals; as for Example, in that of *Julia Augusta* and
 some others, where, tho' the Space is very small, it appears to be set off with se-
 1 veral Ornaments: We here exhibit the Figure of it^r, taken from a Medal in our
 2 own Cabinet. Two Carriages with solid Wheels, are loaden, the one with
 3 Shields and Pikes^s, and the other with Shields only^s.

4 We have here a very singular Carriage^t, which hides another of the same Form:
 It has four solid Wheels, and is drawn by two Oxen. Upon the *Cap'sa* where
 they generally laid the loading, is a little Boat or Skiff, in which are Cuirasses,
 Helmets and Shields. This is probably one of the Boats they us'd to make
 Bridges of to pass the Waters with they met in their Way. We have also seen
 in our Days Boats of this kind carried along with the Army for the same
 purpose.

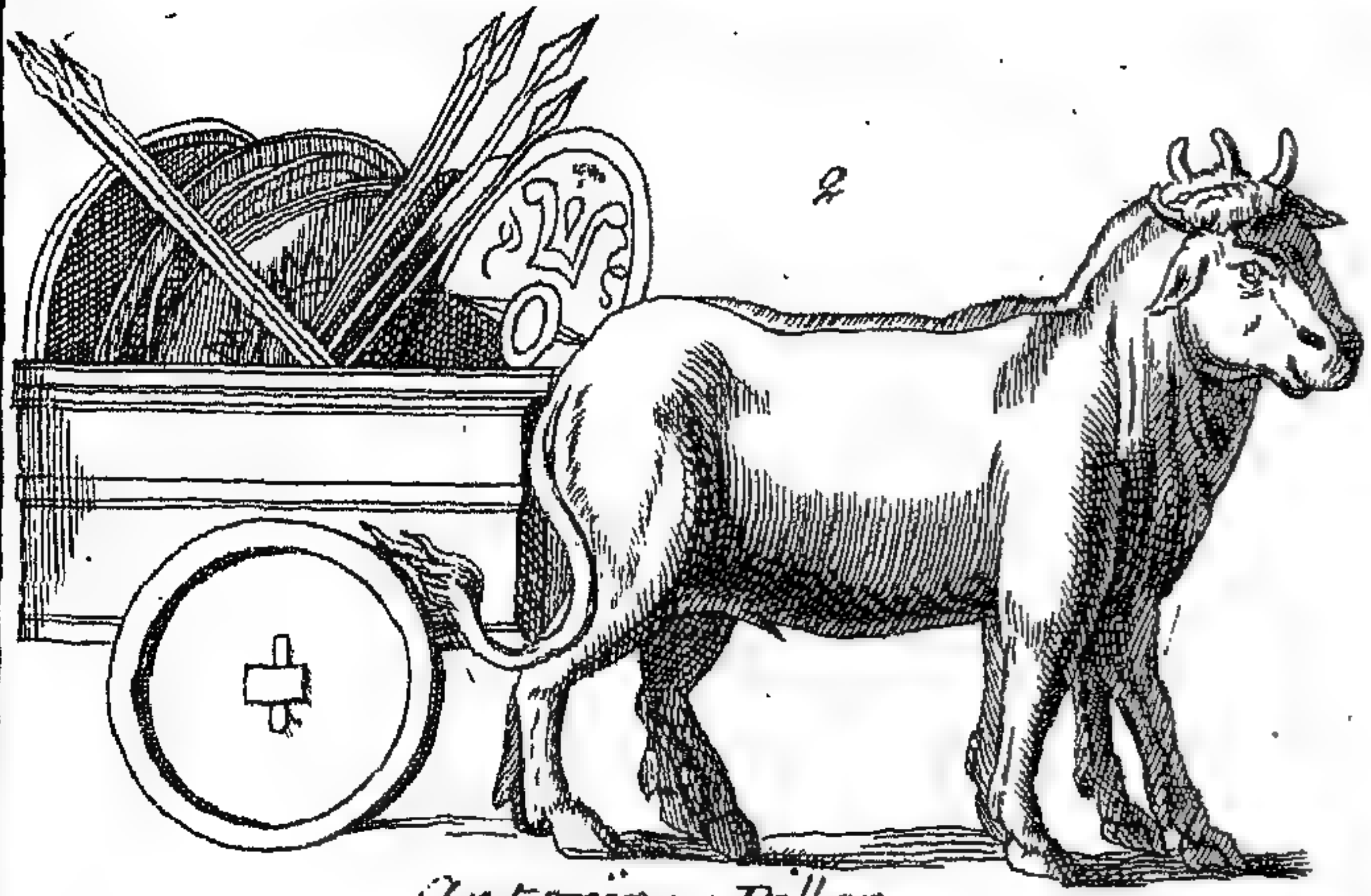
C H A P. VIII.

I. *Calasches used by the Ancients.* II. *An extraordinary Chariot of Antonius Felix.*
 III. *The Cars of the Scythian Princes.* IV. *Elephants, Camels, and other*
wild Beasts, made to draw Chariots. V. *Beasts of Burthen.* VI. *Camels*
loaded.

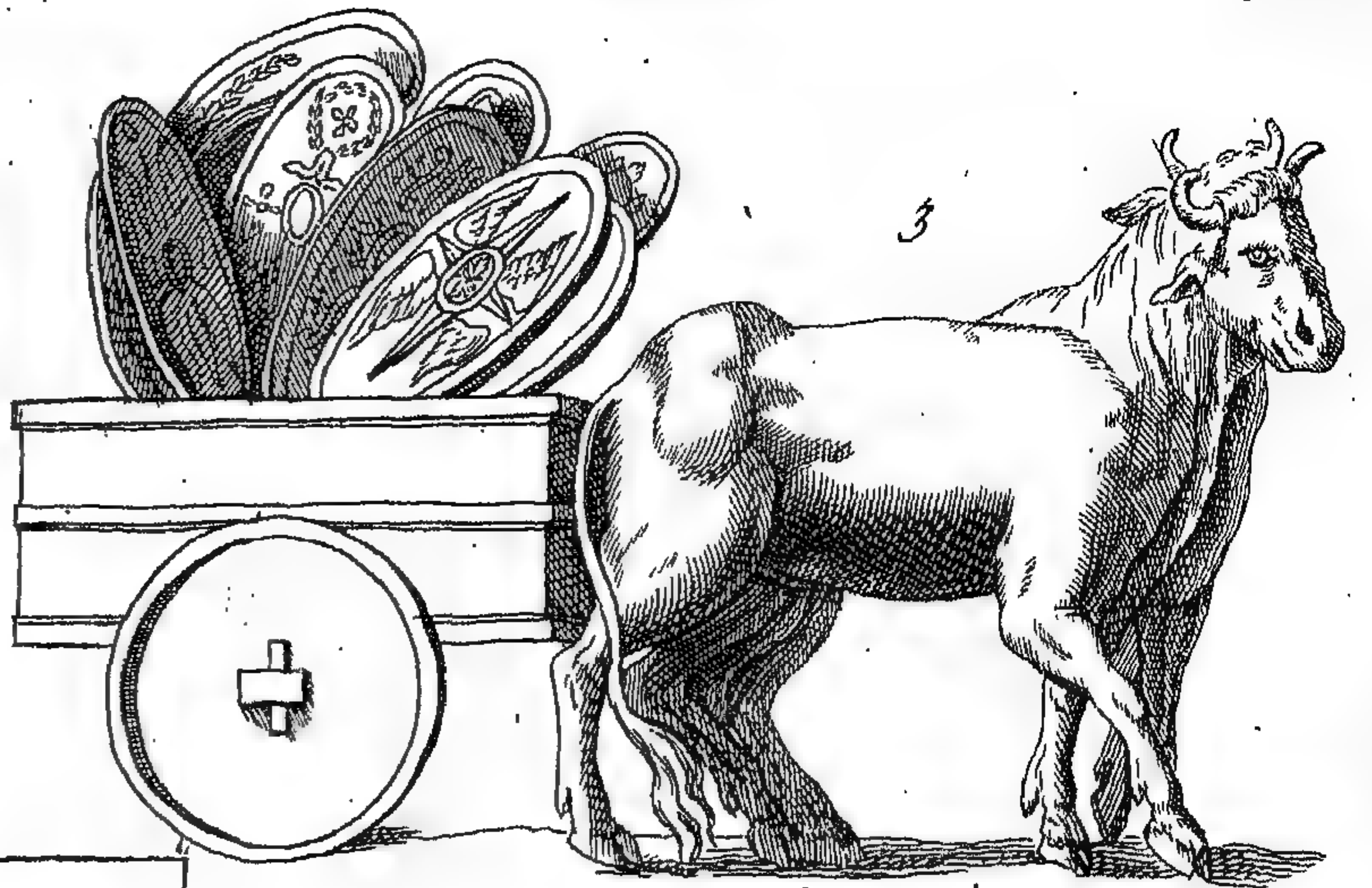
I. **T**HE Use of Calasches is more ancient than is generally thought; three of
 which Vehicles we meet with in the Monuments of Antiquity. The
 first was publish'd by *Maffei*: The second was taken from an ancient Monument
 in the City of *Mets*: The third was found in the Kingdom of *Naples*, and pub-
 lish'd by the late M. *Bulifon*. What Animal it is that draws the last, I know not;
 but the two others are drawn each of them by a single Horse. These Calasches
 differ from those at this Day in nothing but the Seat, which here is round.

5 We have only exhibited the Figures of two of these^s, that of M. *Bulifon* not
 6 appearing to be of so early Antiquity. The two following Carriages^e carry each
 of them a military Engine call'd *Ballista*, the Form of which has been given a-
 bove. The Soldiers that conduct it, seem actually to play the Engine, and to
 shoot out of it large feather'd Arrows. That which yokes the Mules together
 in the Carriage, is a large Chain.

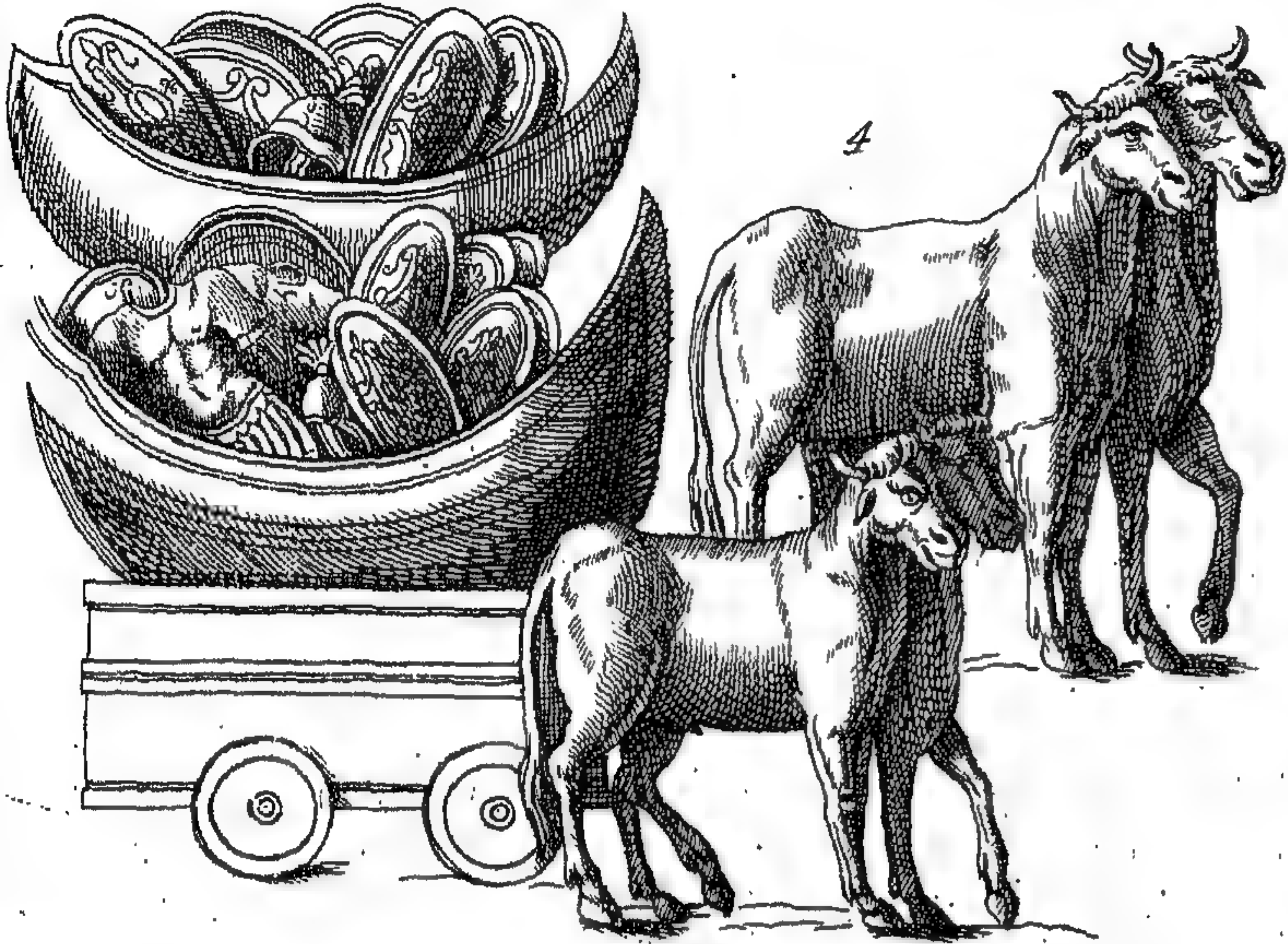
7 II. *Beger* is of Opinion that M. *Antonius Felix*, whom we see here^r with a Wo-
 man, who perhaps is his Wife, sitting in a Carriage of a rude uncommon Form,
 and very large, may perhaps be that *Felix* who was Governour of *Judea*, re-
 turning from thence with his Wife *Drusilla*. He owns indeed that his Opinion
 is



Antonine's Pillar



Antonine's Pillar



Antonine's Pillar



Maffei



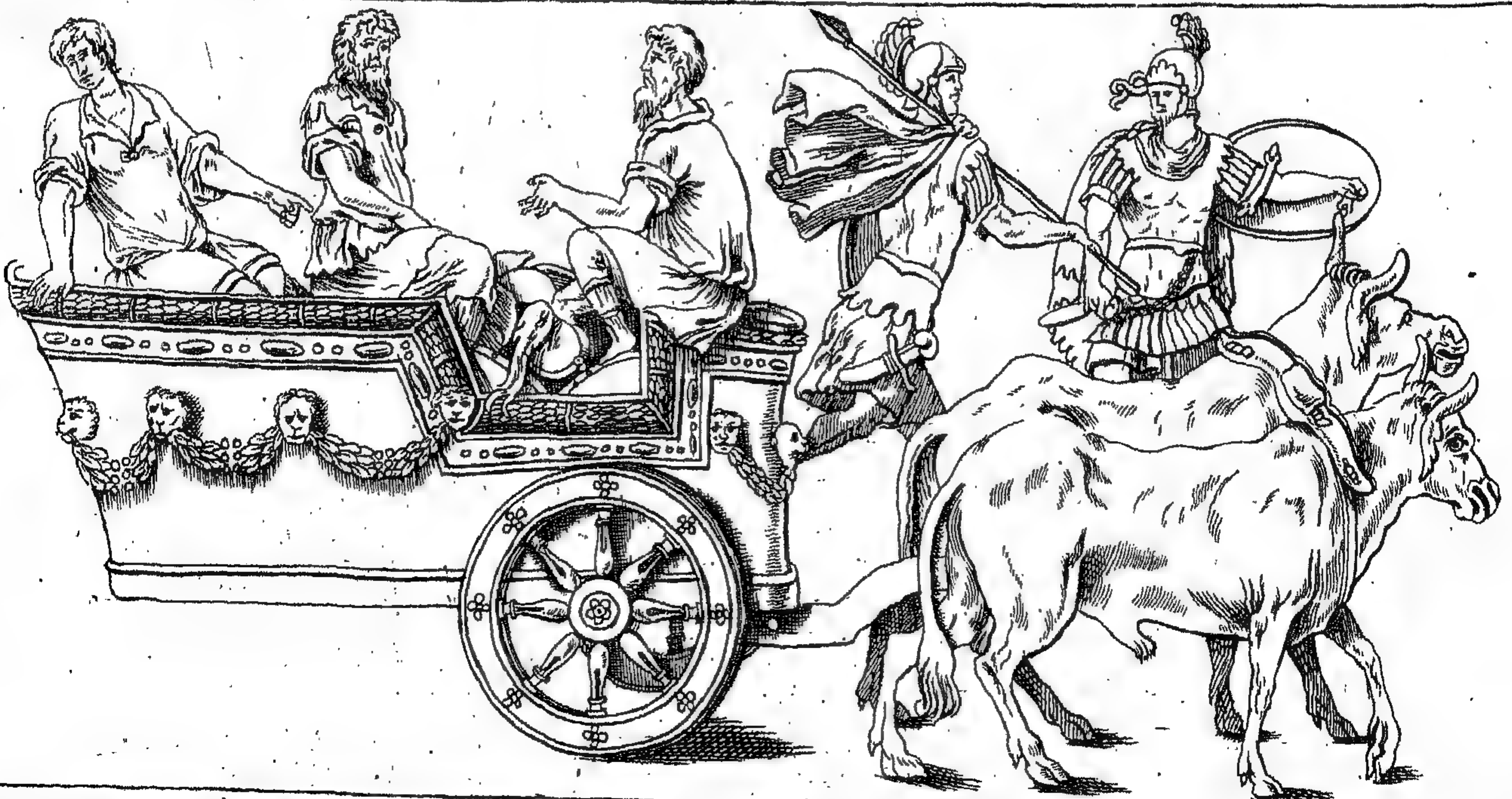
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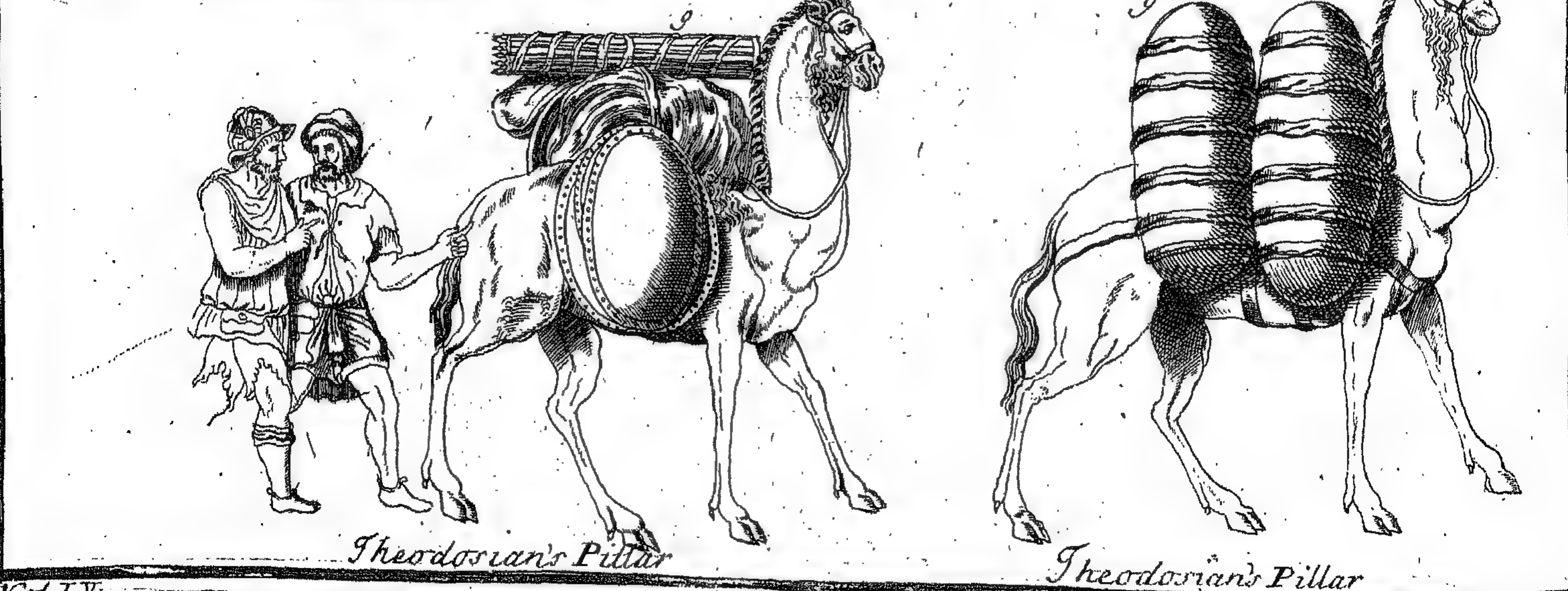
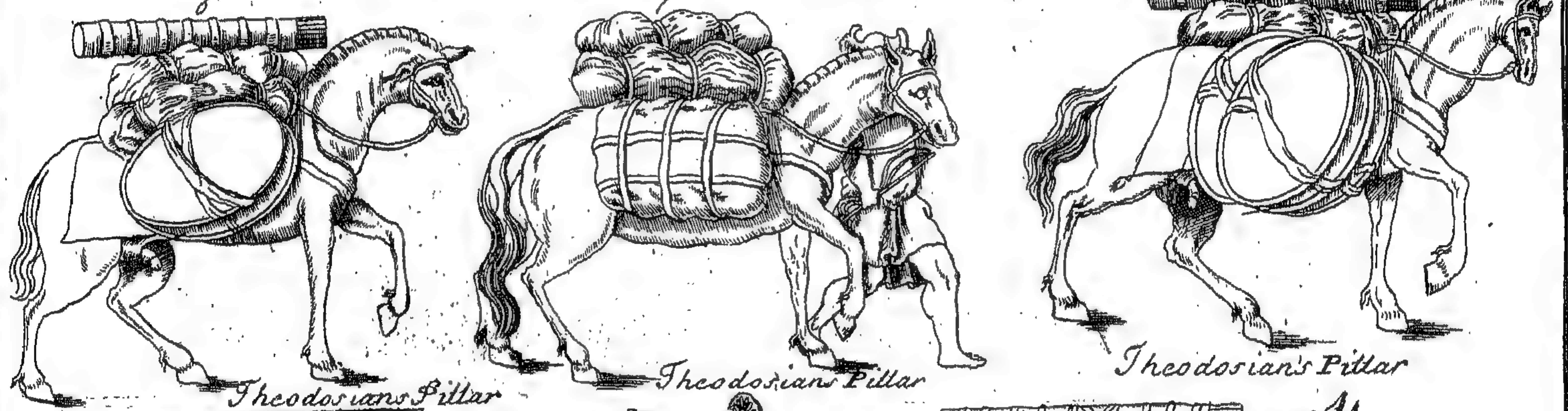
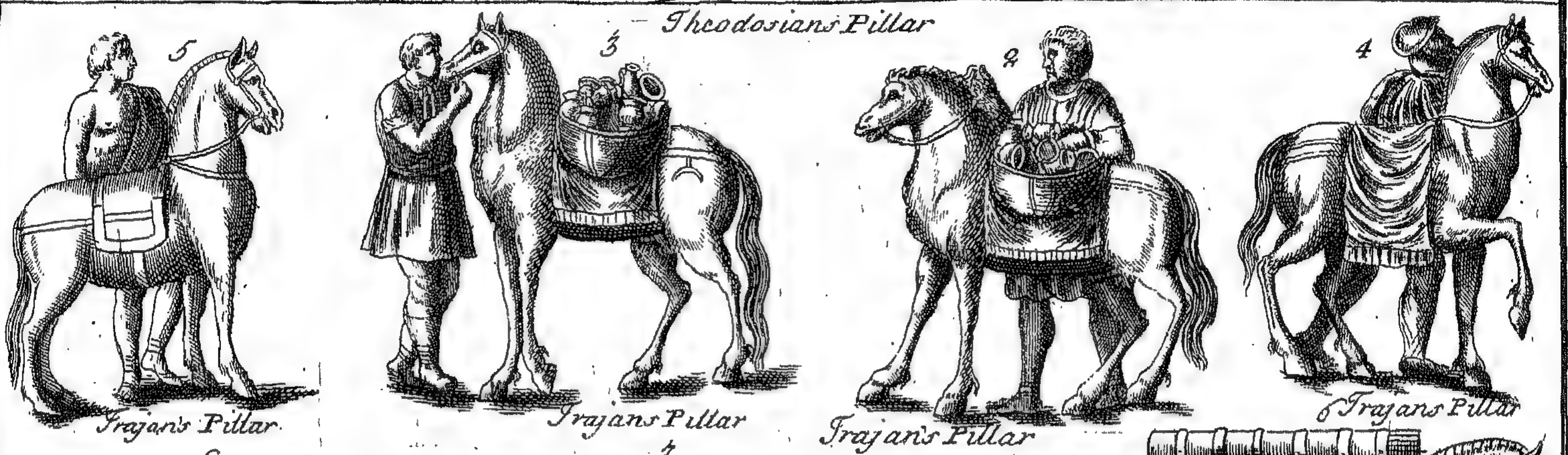


Trajan's Pillar



Beger





is no more than a slight Conjecture, in which I think he is not mistaken: For tho' I look upon this Figure to be indeed antique, yet I cannot but think it of a much later Age, and that by reason of the following Considerations. First, the Hair of this *Felix* is so very long, that it does not seem to agree with the first Age of the Emperors. Next, the People that are in his Retinue are all Foreigners, as appears by their Habit and the Dress of their Legs. Lastly, He that precedes the Chariot, carries one of those Tablets which they us'd to carry in Triumphal Processions, and had inscrib'd upon them the Names of the Cities and Countries that had been conquer'd. The Chariot is drawn by Mules, which the Charioteer drives with his Whip; but is made in such an awkward manner, that I cannot conceive how they could sit securely in rugged uneven Ways.

III. In the *Theodosian* Column there's represented a large Chariot with two Wheels, drawn by two Oxen⁸, in which is a certain Prince of the *Scythian* or some Northern Nation, accompanied with a Woman, who perhaps may be his Wife or Daughter, and another Man. In this Chariot one may observe some Ornaments of Sculpture; and as to the Yoke of the Oxen, the Reader will also observe that. In the same Column is another larger Chariot¹, with four Wheels, but drawn with two Oxen like the former. A Prince of the same Nation also with the former, is mounted thereon, and led in Triumph: On one side he has his Friend, suppos'd to be condoling his Misfortune: Before him sits his Wife with an Infant in her Arms, and behind him is a young Man, who perhaps is his Son. PLATE XLII.

The *Scythians* kept every one their Chariot, and the richer sort among them many. Nay, according to *Lucian*, they were reckon'd of the very lowest Rank that had but one, and were call'd *Octapodes*; that is, the eight-footed People, because they had but one Chariot drawn by two Oxen, which made that number of Feet.

IV. Besides Horses, Asses, Mules and Oxen, the Ancients had also, as we have elsewhere observ'd, other Animals to draw in their Chariots and Carriages. Thus in several Medals we meet with Elephants, sometimes two, and sometimes four together. Sometimes these Elephants have Towers on their Backs, and at the same time draw one of those little Chariots they us'd to run with in the *Circus*. These Towers they generally put upon the Back of single Elephants, both for the Use of the War, and for travelling with, as they do at this Day in *Persia*, *India*, and other Eastern Nations. They made use of Camels also to draw with, which they likewise often did at *Rome*, tho' there remains now no Monument thereof.

We read of wild Beasts too employ'd for this Purpose: Thus *Mark Anthony* made use of Lions, as *Pliny* tells us; and *Elagabalus* did the same, as we learn from *Lampridius*. Tigers were also made to draw, as we find in the Chariots of *Bacchus*: So likewise were Bears; one of which we have seen a Man breaking above with his Whip in his Hand. Boars were in like manner made to draw; and so were *Oryges*, a sort of Animal with one Horn, which *Ptolemy*, according to *Athenæus*, drew his Chariot with. Wild Asses, Stags and *Bifontes*, a sort of wild Oxen, were also us'd for this Purpose, as we have seen above in Processions and elsewhere. But besides all these several sorts of Vehicles, the Ancients had their Litters and Chairs carried by Men, tho' I have no where met with the Figure of them.

They had likewise many other kinds of Vehicles, of which we know nothing but the Names: Such are the *Ploxenum*; the *Sirpea stercoraria*, or Dung-Carts; the *Arcera* made of Boards of Wood, and cover'd on all sides, design'd for the Carriage of sick or aged Persons, and the *Clavulare* made of Hurdles.

V. For Beasts of Burden the Ancients made use of Horses, Affes and Mules ;
 2 and sometimes also of Elephants and Camels. The first Horse² in this
 Plate is loaded with Pots and Vases, probably of Gold and Silver taken in the
 Wars with the *Daci*: They seem to be carried in Paniers, such as we use at this
 3, 4 Day. The next Horse is exactly like the former³; but the following one⁴ has no Bur-
 den, and is led by a *Dacian*. In *Trajan's* Pillar we see either a Horse or Mule,
 5 but which of the two I know not⁵, the Learned having taken it for both the one
 and the other: 'Tis however a Beast of Burden, with a Pack-saddle upon his
 Back call'd *Sagma*, the Form of which the Reader will not here dislike to see.

The *Theodosian* Column furnish us with several Beasts of Burden. We have
 6, 7 here three Mules loaden with Javelins and other things⁶, one excepted⁷, which is
 loaden with Arms only.

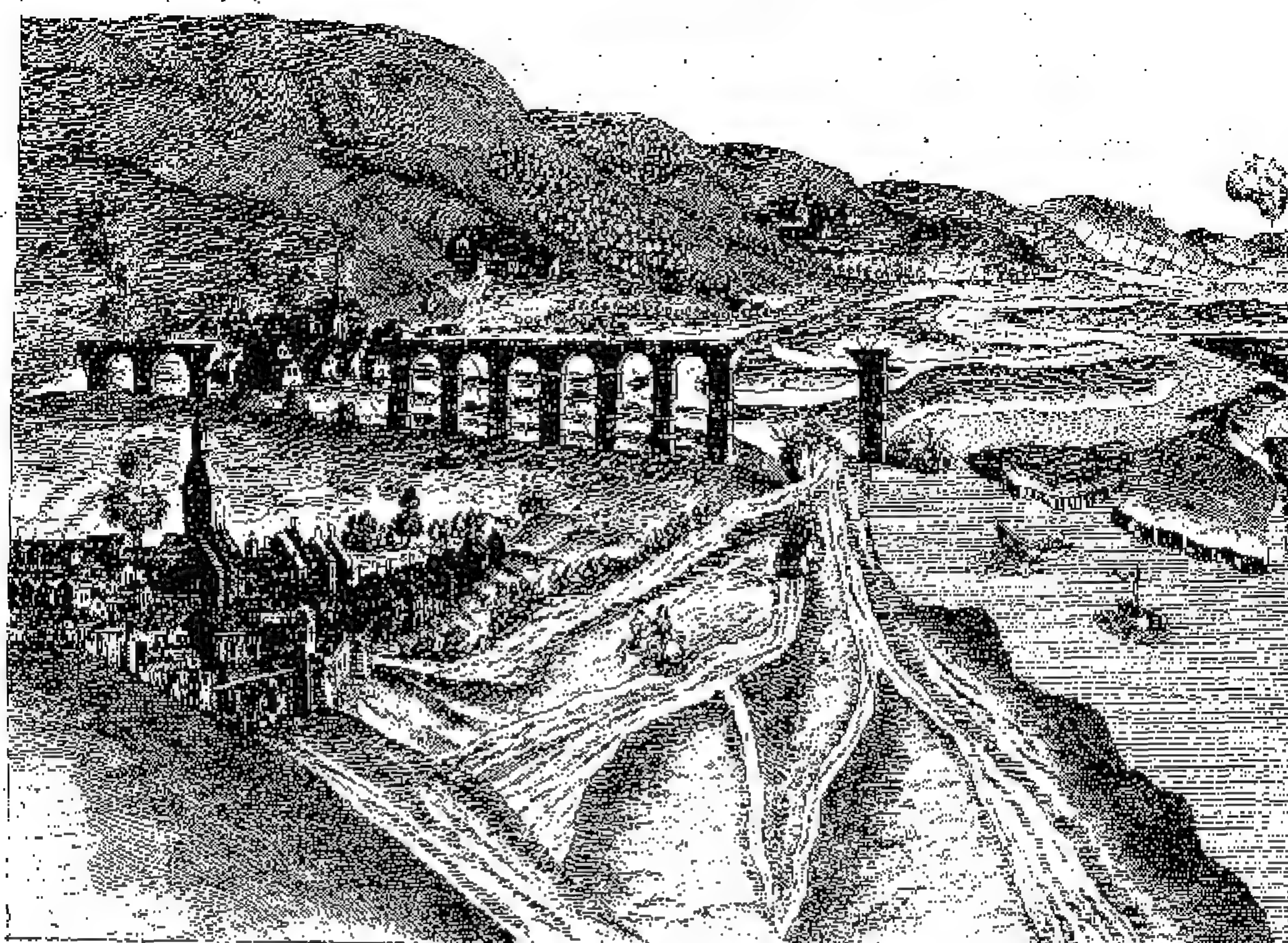
8 In the following Part of the Plate, a Mule loaden⁸ with Pikes and Shields, has a
 Muzzle on after the manner of our Beasts of Burden: 'Tis however the first of this
 kind I have met with in ancient Monuments. The Drivers of this Mule are re-
 markable for their Bonnets and Pouches that hang at their side: One of them has a
 Sword, the Handle of which terminates in the Head of a Bird; which we may
 may also observe in the following Plates.

9 VI. In the same Column we see two Camels with Saddles⁹ on, the one loaden
 with Shields, Pikes and other Goods; and the other with large Vases of an oval
 Form, very proper to skreen all that was under from the Rain.

CHAP. IX.

I. *The Aqueducts of Rome a magnificent Work; after what manner they were made.* II. *Why these Aqueducts do not run in a strait Line, but with Windings.* III. *The Arches of the Aqueducts.* IV. *Other Arches.*

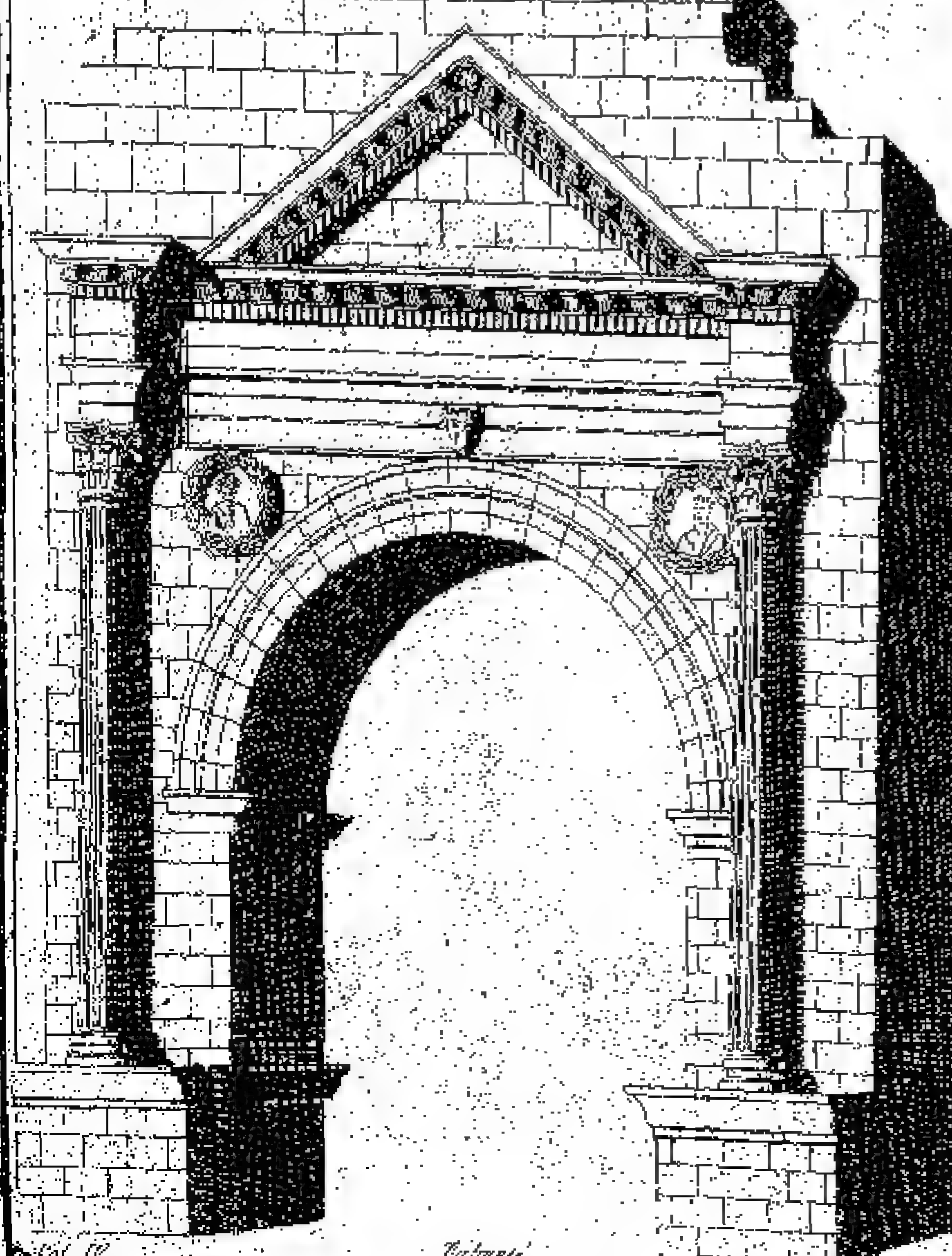
I. **T**HE *Aqueducts* of Rome were, as has been above observ'd, one of the
 Wonders of the World. The great number there was of them, and the
 vast Expence it must be to bring Water to Rome from Places that were thirty,
 forty, and some fixty Miles off, and that too over Arches of Stone, or through
 Mountains and Rocks cut and bor'd for that purpose: All this, I say, is astonish-
 ing, and far beyond any thing undertaken at this Day: Nay, so amazing a piece
 of Work was it, that no one now would so much as think of purchasing a pub-
 lick Convenience at such a rate. There are considerable Remains of these *Aque-*
ducts in the Neighbourhood of Rome; as long Rows of Arches, for Instance, o-
 ver which the Water was carried in Canals to the City. These Arches are some-
 times low, and sometimes very high and lofty, as the Inequality of the Ground
 requir'd. Sometimes also there are two Rows of Arches one above another, which
 were so contriv'd, lest the height of them, had there been but one Row, should
 have weaken'd the Structure. They are for the most part of Brick, but so well
 cemented, that it is very difficult to break the least Piece off. When the Ground
 was too high for the Water to be carried over, they then cut through it and made
 subterraneous Canals, which convey'd the Water into the *Aqueducts* upon the
 Arches built over the Valleys. If a Rock was to be bor'd through, that the
 Course of the Water might not be interrupted, it was bor'd at the height of the
 upper *Aqueduct*, that the Water might be carried from thence into the lower.



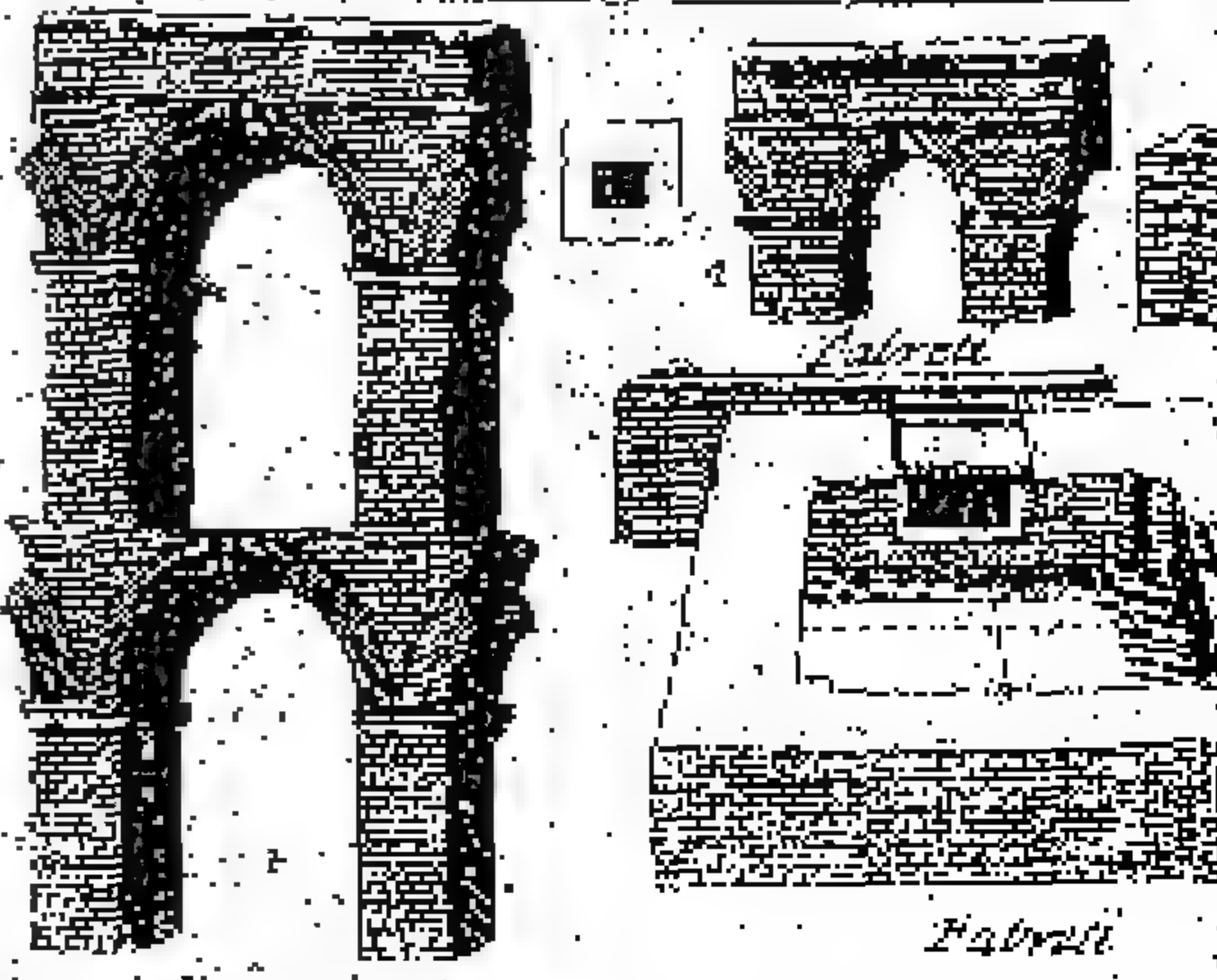
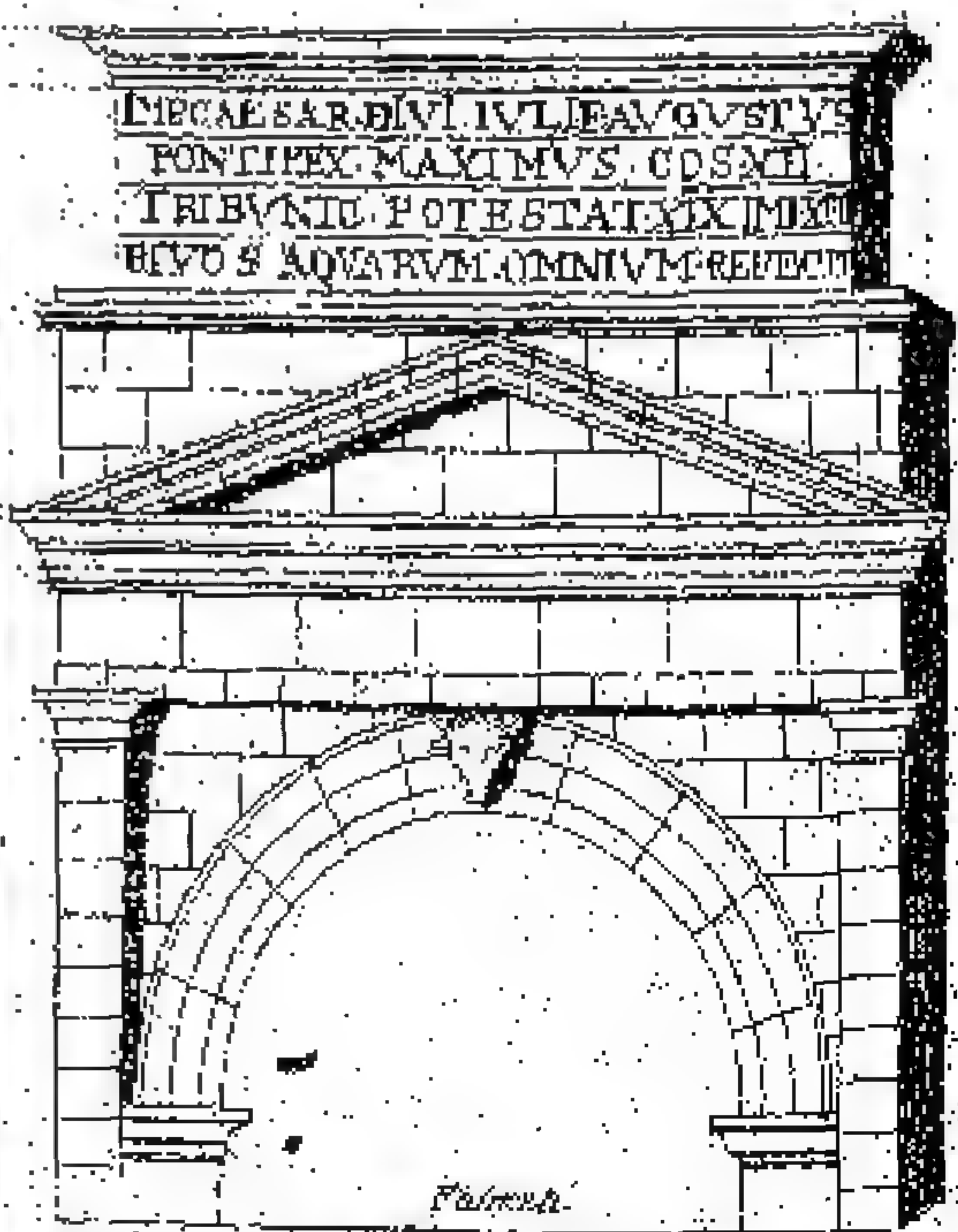
CO S. SEFDESI GAT. OCTAVO.
LEBERRUMIS. ITALIAE VIEL S.

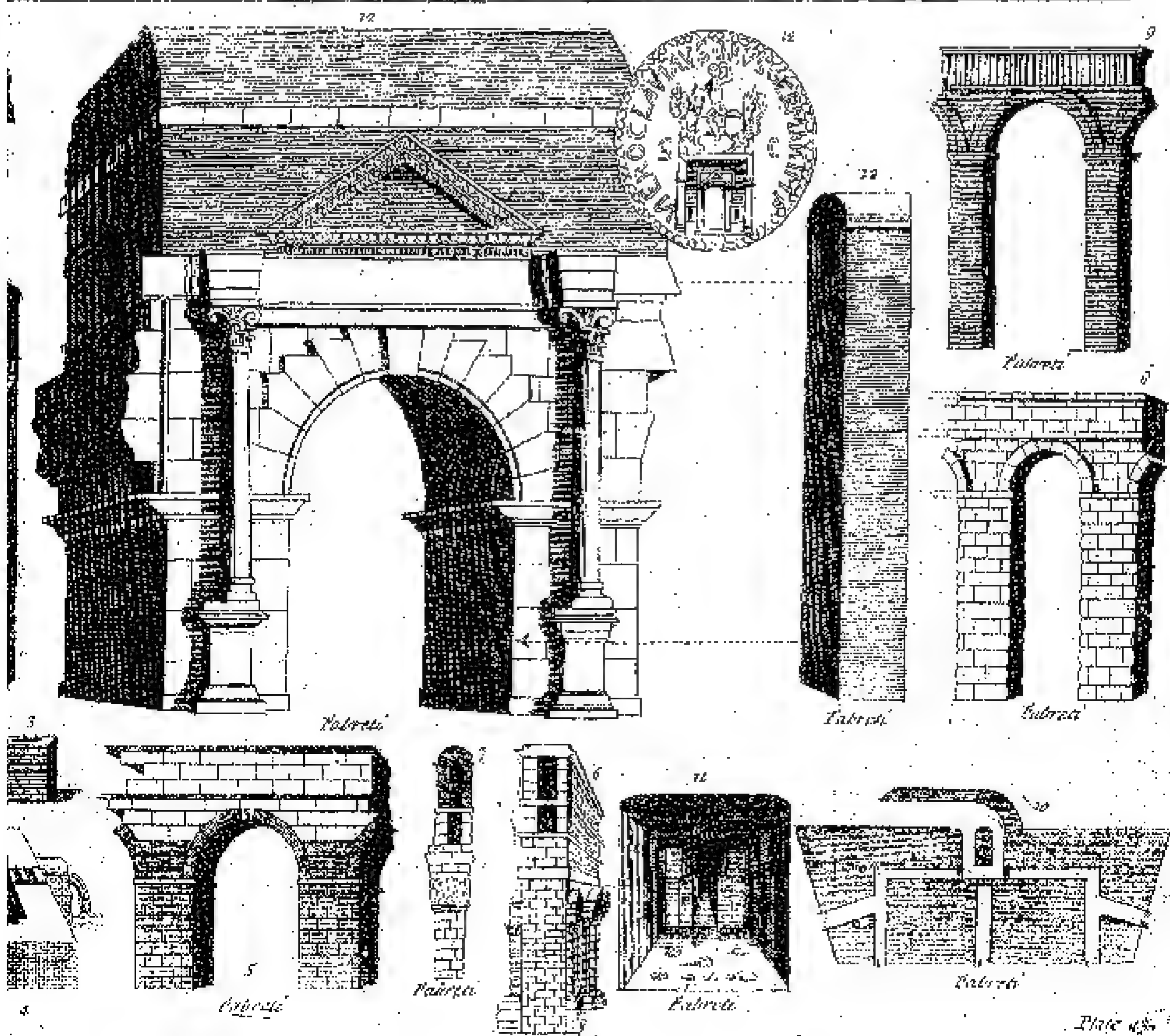
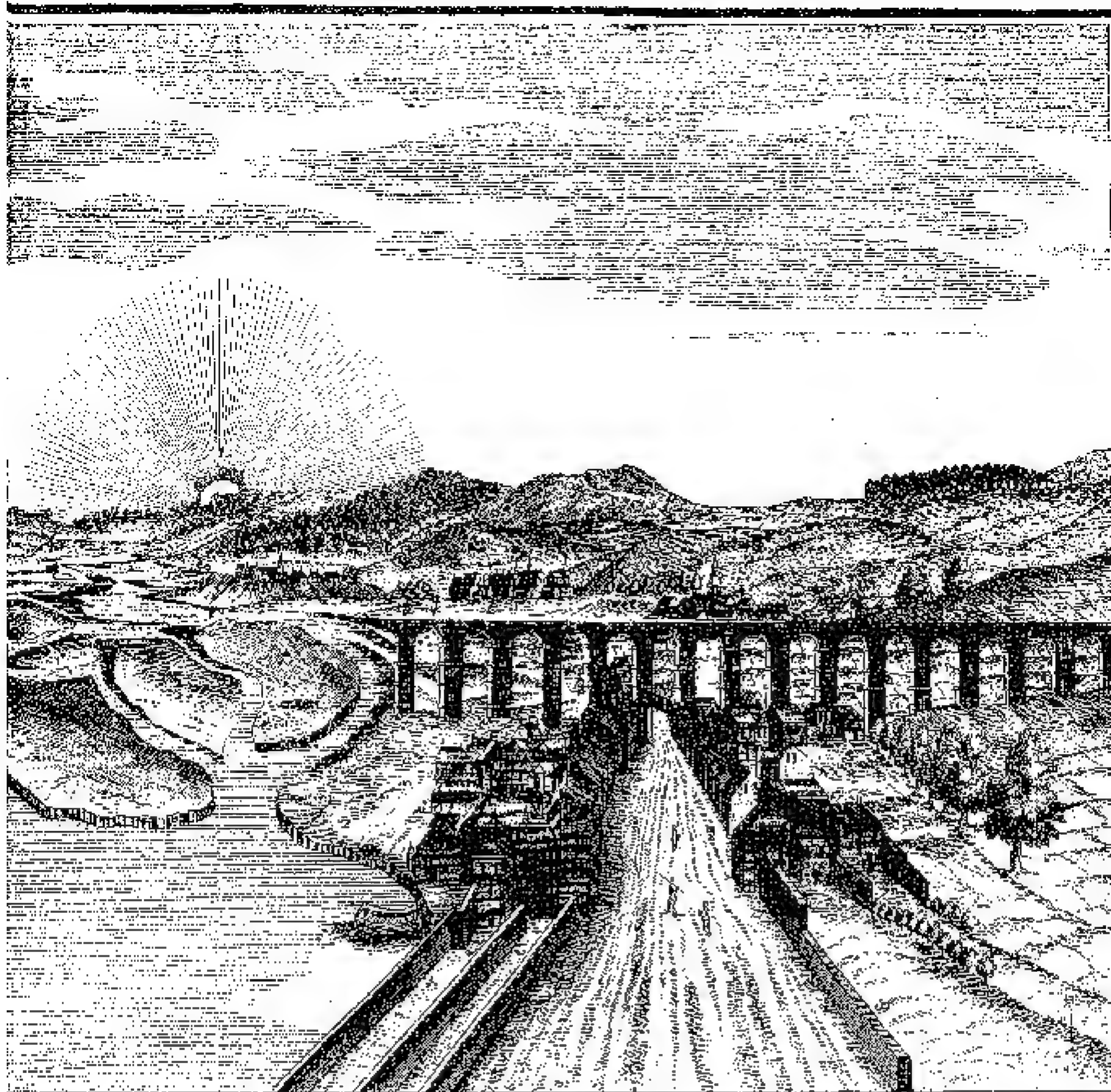
19

Fabretti



18





I my self was once in such a Canal as this in a Rock above *Tivoli*, at a Place call'd *Vicovaro*, which, as the Tradition there goes, is the *Vicus Varronis*. The Canal in this Rock made for the Continuance of the *Aqueduct*, is above a Mile long, all within the hard Rock; the height of the Canal about five Foot, and the breadth four.

II. One thing remarkable is, that those *Aqueducts* which might have been carried in a strait Line to the City, have many Turnings and Windings, not much unlike what they call *Ziczacs*. Some have enquir'd into the Reason of this, and tell us that they were built with all these Windings only for the sake of taking the Advantage of advanced Ground, because had they carried them through lower Ground, the Arches built for the Canals to be carried over, must necessarily have been of a prodigious height. This is the Opinion of the celebrated *Fabreti*; but whether his Reason be good or not, I am not certain: However, I think it's much better than another that he adds, which is, that the Ancients did all this to make the Work more wonderful, by thus increasing their Length and Expence. But *Flaminius Vacca* gives us a more probable Reason for these Windings and Turnings, which is, that by this Means the Impetuosity of the Water is restrain'd, and the Canals thereby preserv'd from the Injury they must have sustain'd, had the Water run on in a strait Line; to which he adds, that the Water is also the purer for it. Another Question also rises, which is this: How it came to pass, seeing there was so considerable a Declivity from the River *Anio* at *Tivoli* to *Rome*, that they should fetch the Water from the same River twenty Miles higher, nay thirty, if we reckon the Windings and Turnings of so mountainous a Country. To which it is answer'd, that this was done that the Waters might be sweeter, seeing those of the River *Anio* are not very good to drink, as being impregnated with the Minerals that are found in several Places through which they run.

III. To give the Reader some Idea of these *Aqueducts*, we have here exhibited some of their Arches after M. *Fabreti*. In the first Place there is represented one of the double Arches¹, built one above another where the Valleys were deep, for a more equal Declivity, and for Security of the Structure, as has been above observ'd. These Arches are twelve Foot wide from Pile to Pile, that is, where they are at the widest, for they are not the same throughout: The Piles are four-square, and eight Foot broad on each side. The other Arch² represented near to this, is very low, by reason of its being built on more advanc'd Ground: Its Breadth is but ten Foot and a half from one Pile to another. Near the Canal there's to be seen one of those Vent-holes³ which they left at certain Distances, that if the Course of the Water should be stop'd by any Accident, it might discharge itself, until the Conduit was cleans'd. In the Canals of these *Aqueducts* there were also Wells and other Conservatories, contriv'd for the purifying and cleansing of the Water, from whence it again continued its Course to *Rome*. Of these we have here also given the Figure after M. *Fabreti*; tho' as to this Image of them⁴, I confess I do not well understand it, nor does what he has said to explain it make it the more intelligible.

The following Arch⁵ belongs to the *Aqueduct* of the *Aqua Maria*, and is sixteen Foot wide from Pile to Pile. The whole Structure is compos'd of three different sorts of Stones; one of a reddish Colour, another brown, and the third of a dirt Colour. Another Figure represents the *Porta Major*, or Great Gate of *Rome*⁶, in Profil, the Front of which we have already seen in the third Volume. Above are two Canals, the highest of which was for the Conveyance of the new Water from the River *Anio*, or the *Teveron*, as they call'd it; and the lowest for the *Aqua Claudia*. The Height of the whole Structure is seventy *Roman* Foot. In the Image of the following *Aqueduct*, there are three

Canals one above another, the highest of which was for the *Aqua Julia*; the next below for the *Aqua tepula*, as they call'd it, and the lowest for the *Aqua Marcia*. The whole Edifice is one and forty Foot and a half high, *Roman Measure*.

- 8 IV. The next Arch in this Plate is the Arch of an *Aqueduct*⁸ made for the Conveyance of the *Aqua Claudia*, and is built of square Stone: The other above it, which belong'd to the *Aqueduct* of the *Aqua Neroniana*, is built of
9 Brick⁹. These two, according to the Account of *Fabreti*, are in height seventy
10 two *Roman Foot*. The following Figure¹⁰ exhibits a Plan of the same *Aqueduct*, at a place where it divides it self into five Branches, as it was given us by the same
11 Author. The Canal of the *Aqua Appia*¹¹ was not made like the other Canals, but was dispos'd within into Steps as it were, so that it grew narrower and narrower to the bottom, as may be seen in the Image of it.

M. *Fabreti* is of Opinion that the following Arch, which is near the Gate of S. *Sebastian* at *Rome*, is the same which *Augustus* caus'd to be built in Honour of *Drusus*; in Proof of which a Medal of *Drusus* is produc'd, where an Arch is represented upon the Reverse very like this. We have here therefore exhibited
12 both the Arch and the Medal¹², together with a four-square Pile belonging to the same *Aqueduct*, which is bor'd also in the Canal as many others are to give Passage to the Water.

- Fabreti* thinks that neither this Arch, nor the following one, erected
13 by *Augustus*¹³, were the Workmanship of *Vitruvius*, who was Cotemporary with that Emperor; the Structure thereof being in many things contrary to the Rules laid down by that great Master of Architecture. The Arch aside this
14 was also erected by *Augustus*¹⁴, who, as the Inscription imports, repair'd all the *Aqueducts*. It has three Canals in it, the highest of which was for the *Aqua Julia*; the next below for the *Aqua tepula*, and the lowest for the *Aqua Marcia*.

C H A P. X.

I. *The Aqueduct of Metz, a magnificent Work.* II. *The Aqueduct of Segovia, remarkable for the wonderful Height of its Arches.* III. *The common Sewers of Rome.*

- I. **A**NOTHER Work to be admir'd, and which was indeed worthy the *Roman Grandeur* and Magnificence, was the *Aqueduct* of *Metz*, of which a good number of very high Arches yet remain: These Arches were built over the *Moselle*, a great River, and in that place very broad. The Figure of this *Aqueduct*
15 I here present the Reader with¹⁵; but as to the Height and Breadth of the Arches, I have never been able to come at the Measure of them. Concerning this *Aqueduct*, *Meurissius*, in the Preface to his History of the Bishops of *Metz*, printed in 1634, thus expresses himself: 'The copious and delicious Sources of the
' *Gorze* furnish'd the *Naumachia* with Water, as often as there was Occasion to
' exhibit a Naval Combat. These Waters were gather'd together in a Con-
' servatory, from whence they were convey'd through subterraneous Canals, made
' of square Stone, and so spacious, that a Man might almost walk upright within
' them; and thence again pass'd the *Moselle* over those high and lofty Arches, to
' be seen at this Day about two Leagues from *Metz*, which Arches are so well
' built,

‘ built, and so strongly cemented, that except part of the middle Arches in the
 ‘ River, which the Ice in a long Succession of time has carried away, they have
 ‘ always withstood, and do at this Day withstand all the Injuries of stormy
 ‘ and tempestuous Weather. From thence again these same pure Waters were
 ‘ convey’d through other subterraneous *Aqueducts* like the first, and gently em-
 ‘ ptied themselves into the Baths and *Naumachia*.

II. If we may believe *Colmenares*, who wrote the History of *Segovia*, and other Authors who have travelled into *Spain*, the *Aqueduct* of *Segovia* may be reckon’d among the most excellent Monuments that Antiquity has transmitted to us. Of this there remains at this Day a hundred and fifty nine Arches, all built of large square Stone without Cement. These Arches are in two Rows one above another, the Height of which, taking in the whole Structure, is a hundred and two Foot. The *Aqueduct* is carried quite through the City, and that too considerably higher than the greatest part of the Houses built on lower Ground. I have spar’d no Pains to procure a Drawing of it, as has also the late M. *de Langlade*, Physician to the Queen of *Spain*, and my very good Friend; but all to no purpose, by reason of the want of Persons there skill’d in the Art of *Designing*.

The *Aqueducts* of *Rome* were without all doubt wonderful, both upon account of their prodigious Length, these Arches being continued some of them forty or fifty Miles, and of the great Variety of Water carried over them from different Parts of the Country. But if without considering the whole together, we only regard those Parts of them that now remain about *Rome*, it must then be confess’d there is nothing that comes up to the *Aqueduct* of *Nismes*, which was the Bridge of *Gard*, the *Aqueduct* of *Metz*, and of *Segovia*.

III. The *Cloacæ* or Common-shores of *Rome* were also reckon’d among the Wonders of that Mistress of the World. These extended themselves quite under the whole City, and were divided into a great number of Branches, all which discharg’d themselves into the River *Tiber*. These *Cloacæ* were large Vaults built with great Strength, and so lofty, that they could pass through them in Boats; which gave *Pliny* occasion to say that the City was suspended in the Air, and that they sail’d underneath it: *Suffossis montibus atque Urbe pensili, subterque navigata*. The same Author adds that this Work was one of the greatest that was ever undertaken; for that the Breadth and Height thereof in some places was great enough for a Waggon loaden with Hay to pass through. These Vaults serv’d to sustain the Pavements of the Streets, in which at certain Distances there were Holes made to let the Filth and Dirt through, by which means the City was always preserv’d clean and pure. Then for the cleansing the *Cloacæ*, there was such an incredible Quantity of Water brought to *Rome* by the *Aqueducts*, which was all emptied into them, and so many other Streams also let in for that purpose, that it was almost impossible any Stop should ever happen, or any Nastiness stay there, but that all must be immediately carried off into the River.



B O O K II.

Concerning the Navigation of the Ancients, the Manner of building Ships, and their different Shape.

C H A P. I.

- I. The Origin of Navigation. II. What Authors have wrote about Navigation. III. Of Floats. IV. Of the Monoxyli.*

I. **A**S to the Origin of Navigation, which I do not intend to spend much time in the Search after, many are of Opinion that it is older than the Flood: To support which, they urge that the Art was too necessary to the Uses of Mankind, and the Invention too obvious and easy, to suppose so many Ages, as were between the Creation and the Deluge, should pass away before it was discover'd; at least before small Boats were contriv'd, such as might serve for the crossing of large Rivers and small Arms of the Sea. Nor was Nature it self wanting to assist them in the Discovery of this useful and necessary Art: For when they saw Trees and Timber float upon the Water, what could be easier than joining several of these together, so as to make them serviceable to pass Rivers with? Besides, they also found by Experience that wooden Cups and Bowls would swim upon the Water; from whence it was easy to take the Hint to make larger Vessels of that kind, big enough to carry Men in. Now I must own all this is very probable, and am much more inclin'd to give into this Opinion, than to suppose with some, that the Art of Navigation was altogether unknown before the building of *Noah's* Ark. Thus much for its Origin; more than which I think cannot be said with any appearance of Truth. Profane Authors, I confess, and Mythologists produce various Opinions concerning the Inventors of this Art; but these, as usual, so clash with one another, that they are not worth our Consideration.

II. We have the Works of a great many learned and ingenious Men upon the Subject of the Navigation of the Ancients; as of *Lazarus Bayffius*, *Stewechius*, *Scheffer*, *Palmerius*, *Fabreti*, Dr. *Potter* Bishop of *Oxford*, and others; who have indeed explain'd many Difficulties concerning that Art, but then they have left others which they themselves own they cannot surmount. Among these Writers I am chiefly oblig'd to *Scheffer*, *Fabreti*, and Dr. *Potter*, to whose Observations I have also added my own, taken both from ancient Authors and antique Monuments; reserving the Liberty of dissenting from them, as often as I thought I had Reason for so doing.

III. In the most early Ages the Art of Navigation was but imperfectly known and exercis'd; but this was no more than what was common with other Arts, which at the first were always rude and imperfect. *Isidore* tells us that the Vessels of the Ancients were at first nothing but certain Pieces of Timber join'd together and cover'd with Planks: *Rates primum & antiquissimum genus navigii e Rudibus lignis asseribusque confectum.* Agreeably to which *Quintilian* says, that if later Ages had made no more Improvement in the Art of Navigation than the preceding ones, we might still have sail'd upon Floats of Timber: *Si nemo plus effecisset eo, quem sequebatur, adhuc ratibus navigaremus.* So true it is, that the Inven-

Inventors of Arts seldom or never contrive them to the best Advantage, and that they only are brought to Perfection by those that come after and improve upon them. It happens nevertheless very often, that either through the Inattention or Negligence of succeeding Ages, many useful things have been lost, that were before known and practis'd. These Floats of Timber abovemention'd, were call'd by the *Greeks* *κείρα*, the Invention of which some attribute to the *Lydians*.

IV. What they call'd *Monoxylon*, was also an Invention of the Ancients; and was a small Boat made of the single Trunk of a Tree made hollow. *Xenophon* takes notice of these *Monoxyla*, and says that one of them would hold three Men. *Polyenus* also makes mention of them, but says they would not carry more than one Man. These little Boats, the Use of which are of the most early Antiquity, are also us'd at this Day in *Greece*, as we are told by *Spon* in his *Itinerary*, who adds, that he himself has been carried often in them, and that they are made of the single Trunk of a Tree, from fifteen to twenty Foot long, about a Foot and a half broad, and much about the same Height. They were used for the most part in shallow Places, by reason that they do not draw above a Foot Water. I was never more surpris'd, continues he, than to see one of these *Monoxyla* passing a Streight of the Sea with two Horses in it, because had they stirr'd never so little, the Vessel must needs have overturn'd, and all have been lost. *Sidonius Apollinarius* makes mention also in his *Panegyrics* of these *Monoxyla*, and says that they us'd to carry Horses in them.

*Pars lintre cavata
Jam dociles exponit equos.*

What *Pliny* relates of the *German Monoxyla* in use in his time, is very surprising. The *Germans*, says he, exercise their Piracies in Boats made of the single Trunk of a Tree, some of which carry thirty Men. The *Gauls* also, according to *Livy*, made use of *Monoxyla*, but were not very curious in the Workmanship, thinking it enough if they would but swim and carry Burdens. *Strabo* tells us that the *Spaniards* also of *Corduba* anciently made use of them in the River, and in another place says that the *Lusitanians* had them likewise.

These *Monoxyla* were also call'd *Alvei*, which is the Name given them by *Pliny* in the Passage above-cited. Thus also *Velleius Paterculus* calls them, (*lib. 2. cap. 107.*) One of these Barbarians, says he, who was a comely well-shap'd old Man, and who by his Dress appear'd to be a Man of the first Quality, got a-board a kind of Trough (*alveum*) made of a Tree cut hollow, according to the Custom of the Country, and went into the middle of the River with it, himself only managing and conducting it. *Ovid* speaking of the small Boat, in which *Remus* and *Romulus* were expos'd, gives it also the Name of *Alveus*; and thus was the *Monoxylon* call'd by many others besides.



C H A P. II.

I. *The Sides of Vessels made anciently of Osier Twigs worked together.* II. *Whether there ever were any Vessels made of Hides of Beasts only.* III. *Barks made of Shells and Tiles by the Egyptians.* IV. *Others of the same People made of the Leaves of their Papyrus.* V. *Some singular Barks made by the Indians with Cane only.* VI. *Vessels that could be folded up.*

I. **W**E have already observ'd that they sail'd anciently upon Floats of Timber. They afterwards began to make Sides to them of Osier Twigs; of which kind was *Ulysses's* Vessel, as may be learnt from the fifth Book of the *Odyssey*. The People of *Great Britain*, according to *Cæsar*, did also the same: The Keels, says he, they make of light Wood, and the rest of Osier-Twigs cover'd with Hides.

II. A Question arises concerning these Boats, which is this: Whether the Ancients or Barbarians ever made them of Hides only, sew'd together, and whether the *Sabæan* Boats made of Hides, taken notice of by *Strabo*, were not made of Wood and cover'd with Hides, or were indeed compos'd of nothing else but Hides pitch'd over. *Scheffer* is of Opinion they were of Wood, and cover'd with Hides, and gives this Reason for it, namely, that as *Strabo* calls the *Sabæan* Boats, Boats of Hides, so does *Xiphilinus* also call those us'd by the People of *Great Britain*, which *Cæsar* says nevertheless were made of Wood, and cover'd only with Hides; which is a plausible Reason enough. The *Carabia* were in like manner made of Osier Twigs.

The same *Scheffer* also thinks, that what *Greek* Authors call *δερμάτινον πλοῖον* is the same thing as the *Cymba futilis*, or stitch'd Boat mention'd by *Virgil*: Which Explication a Passage in *Pliny* also favours, where it is said, that at this Day in the *British* Ocean they make Vessels cover'd all over with Hides, very fit and useful for Navigation: *Etiamnum in Britanico Oceano utiles naves corio circumfuto sunt.* (Lib. 6. Cap. 56.)

III. What *Strabo* says of the *Egyptians* making Boats of Tiles and Shells would be thought incredible, were he not an Author of undoubted Credit, and who spoke of what pass'd in his time. *Tanta facilitate navigant, ut nonnulli testaceis utantur cymbis.* Which Passage agrees with another in *Juvenal*, where it is said that the *Agathyrsti*, a People of *Egypt*, make Boats of baked Earth, and row them with painted Oars.

----- *Imbelle & inutile vulgus*
Parvula fictilibus solitum dare vela faselis
Et brevibus pictæ remis incumbere testæ.

IV. 'Tis certain the *Egyptians* made small Boats of their Plant call'd *Papyrus*, which was what they anciently used to make Writing-Paper with: Nay, they continued this Use of it down to the ninth and tenth Century, and made so great a Quantity of it, that they serv'd the greatest Part of the World with it. Hence it was that the Tyrant *Firmus* boasted of having Paper enough to subsist his whole Army; which Passage some have understood as if the *Papyrus* was a thing to be eaten, whereas it had quite another Meaning, and, as *Casaubon* observes, signified no more than that *Firmus* had Paper enough to subsist his whole Army with the Money it would bring when 'twas sold. That they made Boats of this same *Papyrus*

papyrus we have the Testimony of *Strabo*, *Pliny*, *Lucian*, *Plutarch*, and many others, who all expressly say so. The last-mention'd Author in his Treatise of *Isis* and *Osiris*, tells a very remarkable Story of the Boats made of this Plant, which is this: The Crocodiles, he says, which were very troublesome and mischievous to Passengers that went in small Barks, never did any Mischief to such as sail'd in those Boats of *Papyrus*; the Reason of which, according to the Tradition of the Place, is, that the Goddess *Isis* had once sail'd in one of those Boats, and that from that time the Fear or Respect they had for that Goddess always restrain'd them from doing any Injury to those that travell'd in Boats of that sort. The Leaves of the *Papyrus* were very broad, and full of long Threads, as may be seen in a very scarce and curious Book compos'd of them, and preserv'd in this Abby. 'Tis easy to conceive how a Bark might be made of a good number of them sow'd together, and pitch'd afterwards to keep the Water from penetrating.

V. What seems more incredible is, that in the *Indies*, according to the Testimony of several Authors, they make Boats of one single Reed or Cane. These Canes, we are told, had many Knots, and were hollow within, like those of *Languedoc* at this Day; but so monstrous thick, that one Joint between Knot and Knot, says *Heliodorus*, when 'twas cut in two, was sufficient for two Boats. *Pliny* also says that some of these Boats were big enough to carry three Men. *Diodorus* likewise takes notice of these Boats, ~~but does not altogether~~ agree with the preceding Authors. 'In *India*, says he, there's a great quantity of Reeds, so very thick, that a Man can hardly embrace one of them with both Arms: Of these they make Boats or Barks, which are of great Use and Service, because the Worms never come at them.' But when this Author says that a Man can scarce clasp one of these Reeds about, he seems so far from intimating, that one of them was big enough to make two Boats, that he must be understood to mean that several of them were join'd together to make one. Nay, the same *Diodorus* adds that they made their Barks in such a manner, as that the Parts might be separated again; which agrees very well, as *Scheffer* has observ'd, with what *Quintus Curtius* says, whose Words are these: 'He gave Orders, says he, to march to the River *Indus*, and to make Vessels to transport the Army over to the other side. They therefore who had the Command thereof, seeing there were several Rivers to pass, so contriv'd their Boats, that they could take them in pieces for the Convenience of Carriage, and join them together again as there was Occasion.' The *Romans* however had a shorter and more commodious Way of making Bridges; for they carried entire Boats in their Waggon, as we have seen above: An Invention which tho' probably has not been continued alway, yet has been reviv'd in our Days.

VI. But besides all these, they had another sort of Boats, which they could fold up, as we are inform'd by *Pliny*. The *Ethiopians*, says he, who sail upon the *Nile*, when they are arriv'd with their Barks at the Isle of the *Elephant*, and are near the Cataracts, fold their Boats together, and clap them upon their Shoulders, carrying them in that manner until they are got below those dangerous Falls of Water, and then go a-board them again. *Scheffer* is of Opinion that these *Ethiopians* made their Boats of Hides, and that they fasten'd to them a sort of circular Planks, which they took off when their Boats were out of the Water; but that does not appear in the Text of *Pliny*, tho' the Sentiment is probable enough. *Herodotus*, speaking of the *Armenians*, takes notice of a sort of Barks in use among them not unlike these. 'All their Barks, says that Author, are of a circular Form, and made of Leather: For when they have prepar'd a Frame of Osier of the same Form, they cover it on the out-side with Skins, which serve

‘serve for the Bottom of the Vessel. They have neither Prow nor Poop, but are made round like a Shield; after which they stuff them with Straw, and then load them and commit them to the River. In these Boats they carry Affes, and when they arrive at *Babylon*, they unlade and sell all the Wood and other Materials of the Boats, except the Skins, which they lay upon the Affes and travel with to *Armenia*.’ *Pliny* speaks also of Boats of the *Nile* made of Rushes; of which kind, it’s thought, that was, in which the Child *Moses* was expos’d.

CHAP. III.

I. The sorts of Timber used by the Ancients for the building of Ships. II. The manner of joining the Beams and Planks. III. Stuppa, or Tow, thrust between the Joints and Crevices. What they used to dawl their Vessels over.

I. WHAT has been hitherto said in this second Book, regards the small Boats of the Ancients, the Form or Matter of which, or sometimes both together, were uncommon and extraordinary. Then as to the manner of building them, in use among the *Greeks* and *Romans*; the first thing they took Care of was to make them of Wood that was thoroughly dried, and of a Quality neither too light nor too heavy: Pine and Fir were therefore what they most commonly made use of. *Lucan* indeed takes notice of four sorts of Wood proper for Ship-building.

*Procumbunt orni, nodosa impellitur ilex,
Silvaeque Dodones, & fluctibus aptior alnus.*

The *Ornus* was a kind of wild Ash; the *Ilex* a Species of Oak, very hard and heavy, and by Consequence does not seem very proper to make Vessels of, except for Pegs or Oars: The Beech, which *Lucan* here expresses by the Wood of *Dodona*, was neither too heavy, nor too light; tho’ there are some that will have it, that by the *Silva Dodones* he meant Oak: The *Alnus* or Alder-tree is here mention’d as the properest of all the rest for this purpose; and so *Statian* takes notice of it, calling it *Alnus amica fretis*: *Claudian* also sometimes takes it for a Vessel, and *Virgil* speaks of it as of a light Wood very fit for Navigation:

Necnon & torrentem undam levis innatat Alnus.

The Kings of *Egypt* and *Syria*, *Pliny* says, for want of Fir, made Boats of Cedar, and had whole Fleets of such. The *Romans*, however, as appears, chose to make use of Fir rather than any other Wood, and cut down whole Forests of it for the Purpose: Sometimes also the People in Alliance with them furnish’d them with that sort of Wood. In *Greece* we likewise find that the Kings furnish’d their Friends and Allies with Timber for Ship-building: Thus *Polybius* tells us that *Ptolemy* engag’d to serve the *Rhodians* with Timber for ten *Quinqueremes* or Gallies with five Banks of Oars, and as many *Triremes* or Gallies with three Banks, and with Beams forty Cubits long. *Perseus* also furnish’d the *Rhodians* with a great Quantity of Materials for the fitting out a Fleet.

II. The manner of joining the Beams and Planks together was anciently with Iron Nails; tho’ Brass ones were in greater Esteem, as the best for Use. Thus *Hiero*

Hiero built a large Vessel, of which hereafter, whose Nails were all of Brass, and of a prodigious size. *Vegetius* also, after he has told us that the *Liburnæ*, a sort of Vessel, ought to be built of Cypress, or Pine, or the wild *Larix*, or Ash, immediately adds that brass Nails ought rather to be us'd therein than Iron, and that altho' the Expence may be thought greater, yet is it indeed less, considering that brass Nails last longer, and preserve themselves entire, whereas those of Iron will with Time and Wet contract Rust, and by consequence soon waste away.

III. They made use of *Stuppa*, or Tow, to stop up the Joints and Crevices with, as also of a kind of Rush call'd *Spartum*. After that, the Vessel was done over with liquid Wax. The *Greeks* and *Romans* also pitch'd them over, and, according to *Vegetius*, employ'd therein both Wax and Rosin. When the Vessel was finish'd, she was drawn to the Sea with great Ceremony, both the Vessel and those that dragg'd her being crown'd with Flowers: 'Tis thought also that she was dedicated to the Deity whose Figure she carried. Before she was taken into the Service of the War, she was prov'd and tried whether she would go well with the Oar, and would be fit for the Service.

CHAPTER IV.

I. *The principal Parts of a Ship; the Carina, or Hulk of the Vessel, divided into three Parts or Decks one above another.* II. *The Prow and the Rostrum terminated it at one End.* III. *Images of the Prows.* IV. *What the Aplustre was.* V. *A Vessel or Ship of Aurora.* VI. *The Stern.*

I. **T**HE principal Parts of the Ship were the Prow, the Poop, and the middle between both, call'd in *Latin*, *Carina*, which was indeed the Keel or Bottom of the Vessel. The Poets often use the Word *Carina* to signify the whole Vessel; but it properly means no more than the Keel or Bottom which lies between the Head and the Stern: Thus flat-bottom'd Boats were, according to *Isidore*, thought to have no *Carina* or Keel. Upon the Keel were the Sides of the Ship, which were divided into three Parts, or Decks, one above another; the lowest of which was call'd *θάλαμος*, the middle *ζύγας*, and the uppermost *θρανίον*. In the lowest Division were the Rowers call'd *Thalamitæ*; in the next above those call'd the *Zygitæ*, and the highest the *Thranitæ*. Over-against these three Ranks of Rowers, plac'd in this manner one above another, as we shall see below, there were Holes through the Sides of the Vessel to put the Oars through, which Holes are by *Festus* call'd *Columbaria*, as resembling the Holes in a Dove Cote. One would be apt to think that these three Ranges of Oars were to be found in the *Triremes* only, which were Boats so call'd from their having those three Ranks of Oars: But forasmuch as *Polybius* (in a Fragment of his 17th Book) takes notice of the *Thranitæ* in a Vessel of twelve Ranks of Oars, we may thence conclude, that, how great soever the Ship was, the Name of the *Thranitæ* was given to the Men at the highest Rank of Oars: Thus in *Ptolemy's* great Ship of forty Ranks of Oars, which we shall describe below after *Callixenus*, we are told by *Athenæus* that there were Oars for the *Thranitæ*. *Scheffer* is also of Opinion that the lowest Rank of Oars was always the *Thalamus*, the highest the *Thranos*, and that all the intermediate Ranks, how many soever they were, were always call'd *Zyga*.

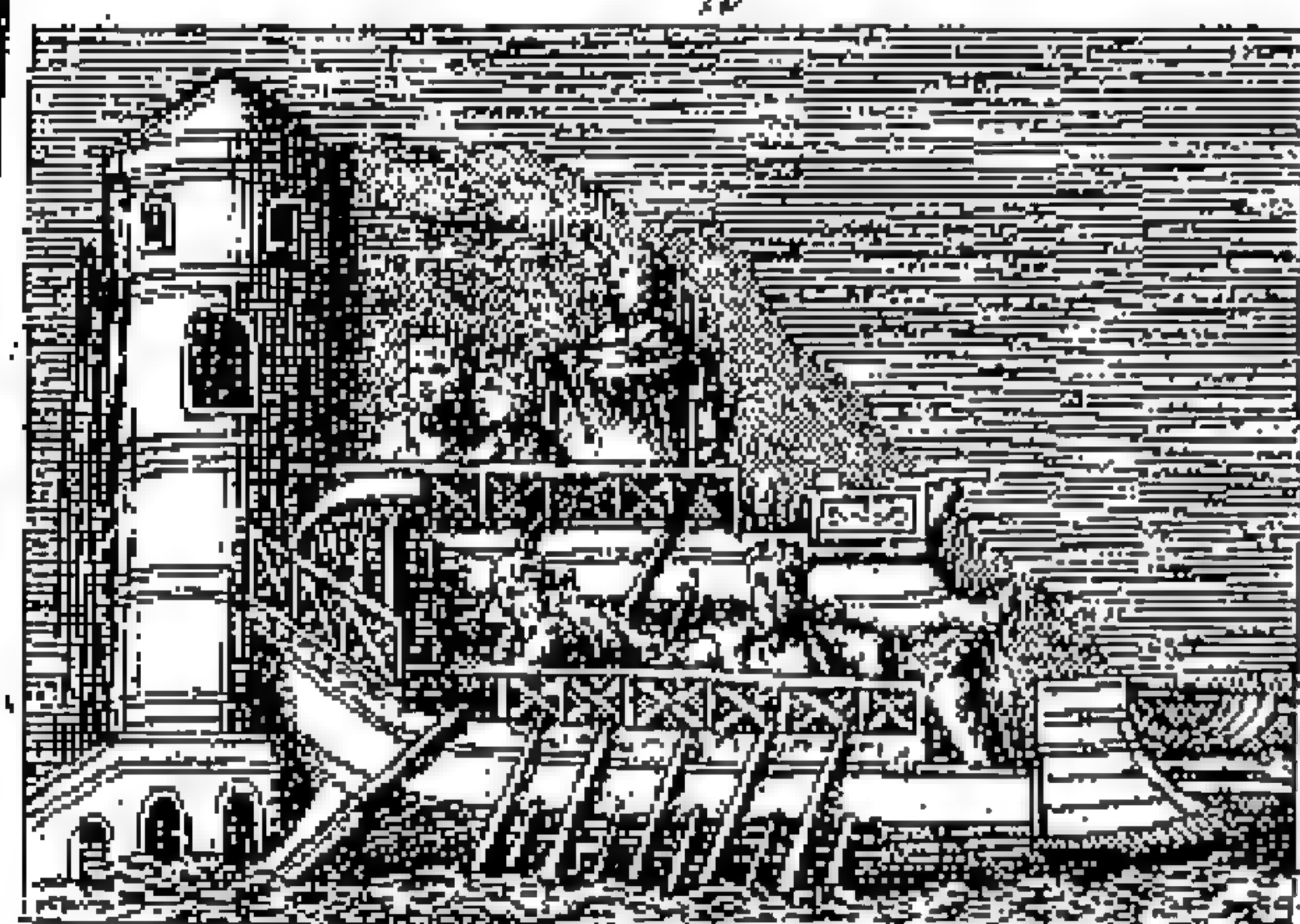
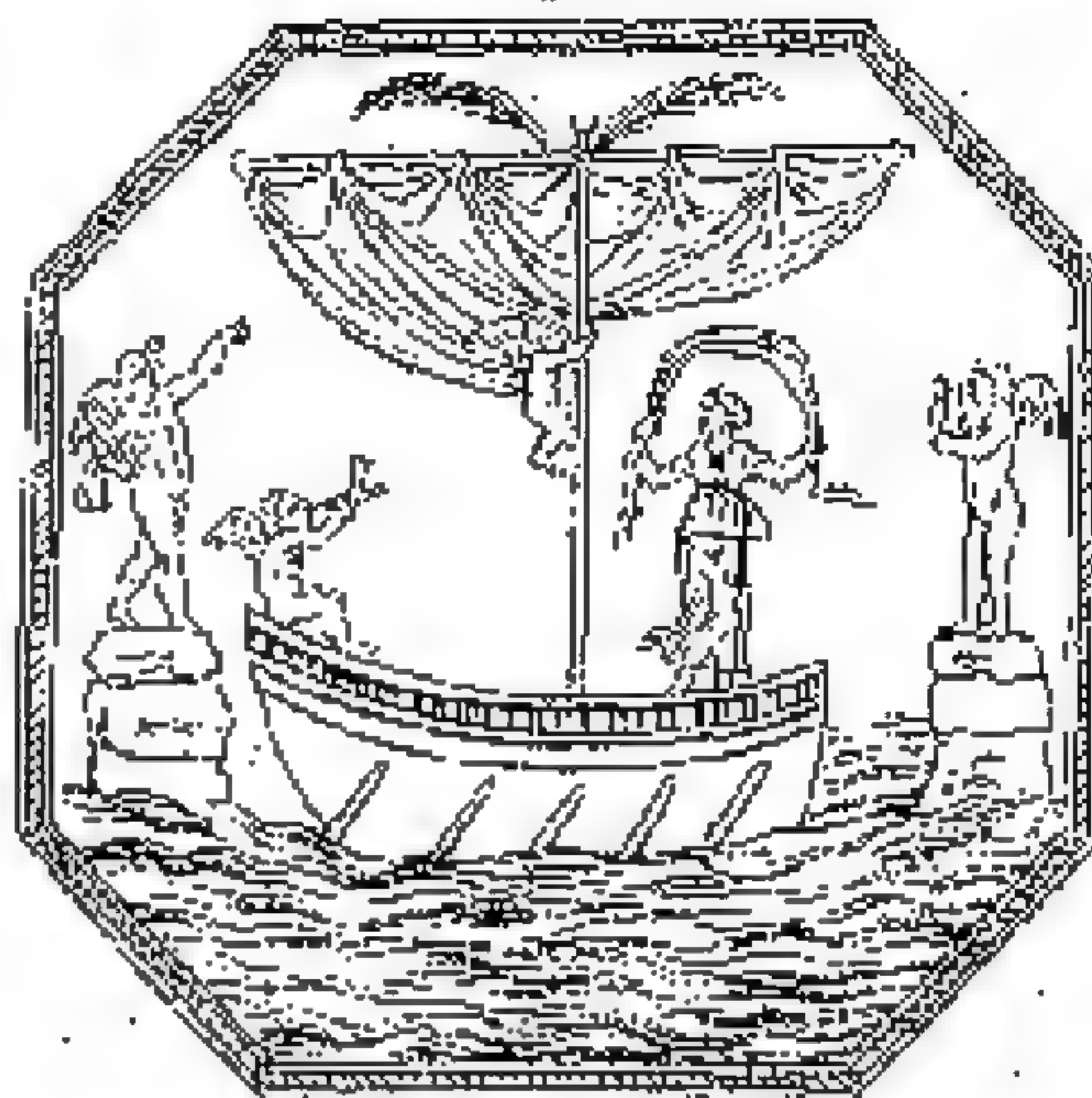
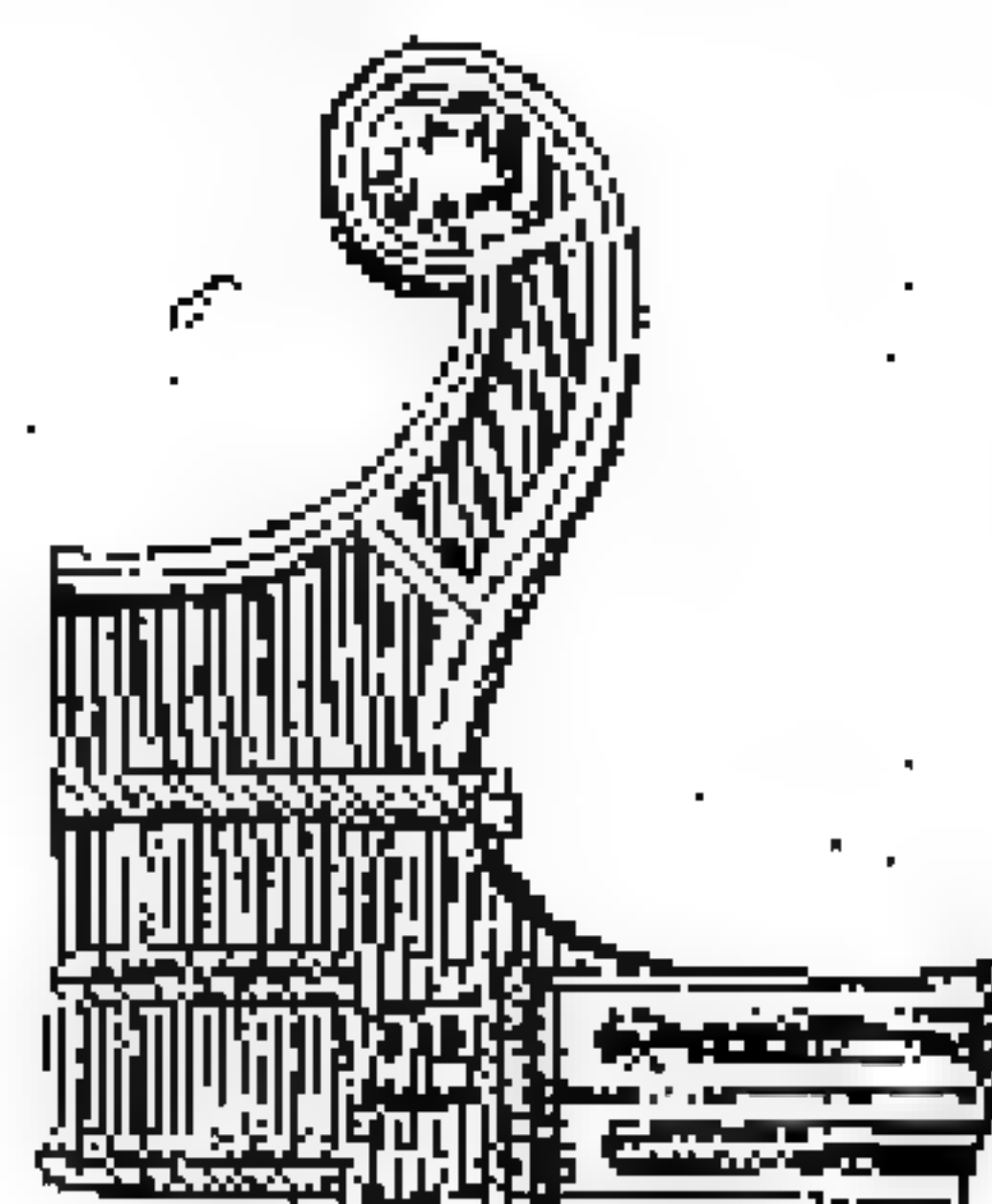
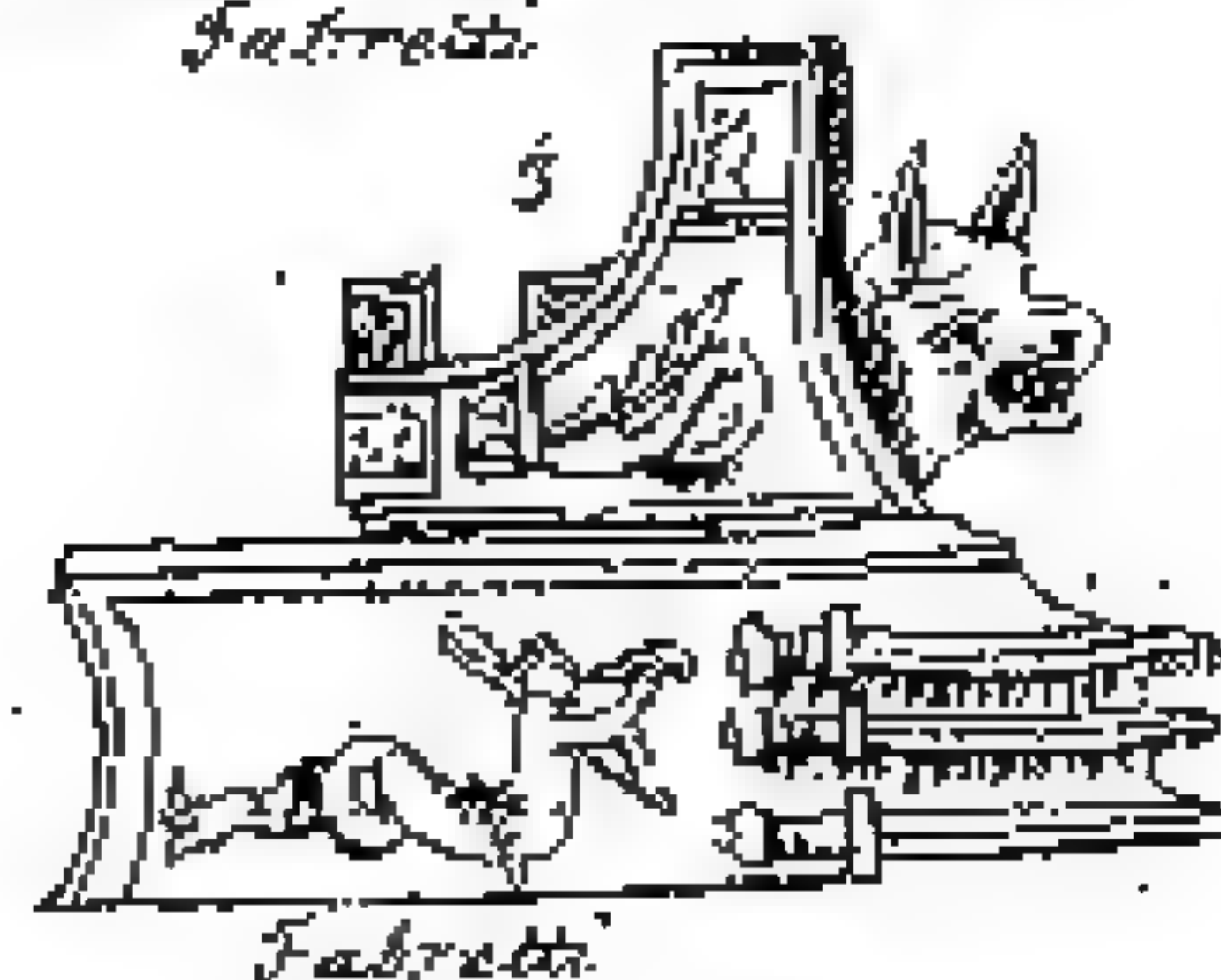
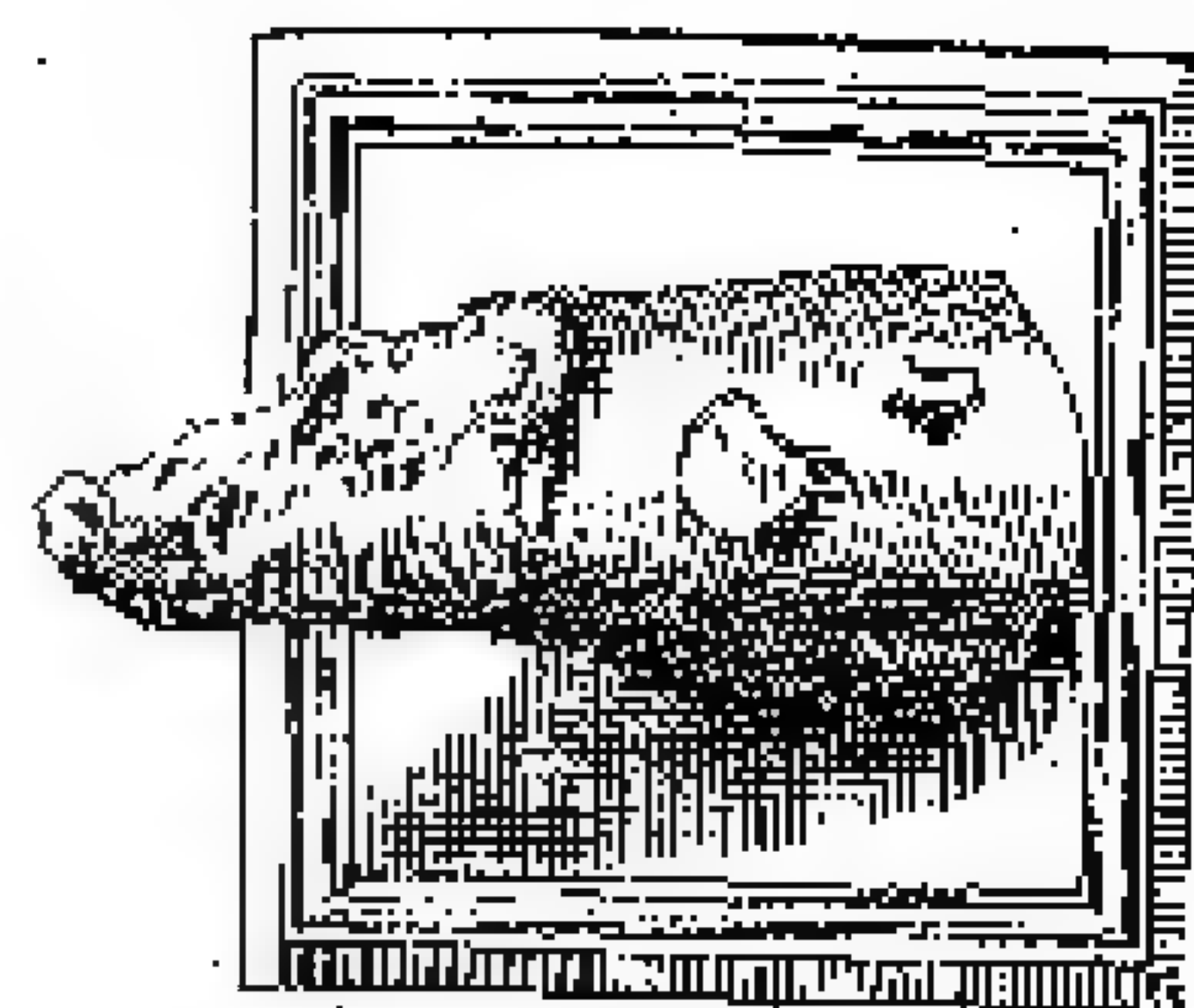
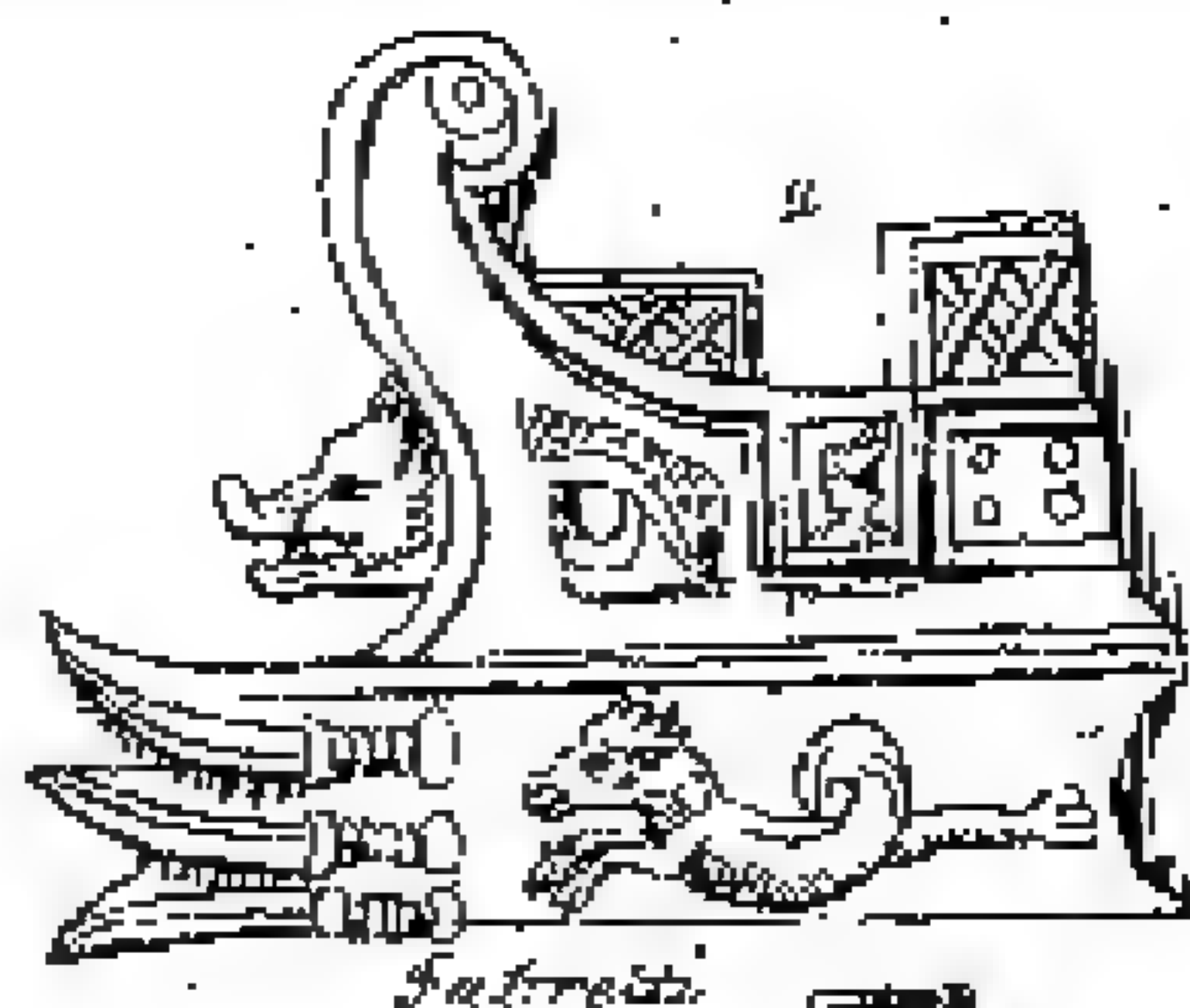
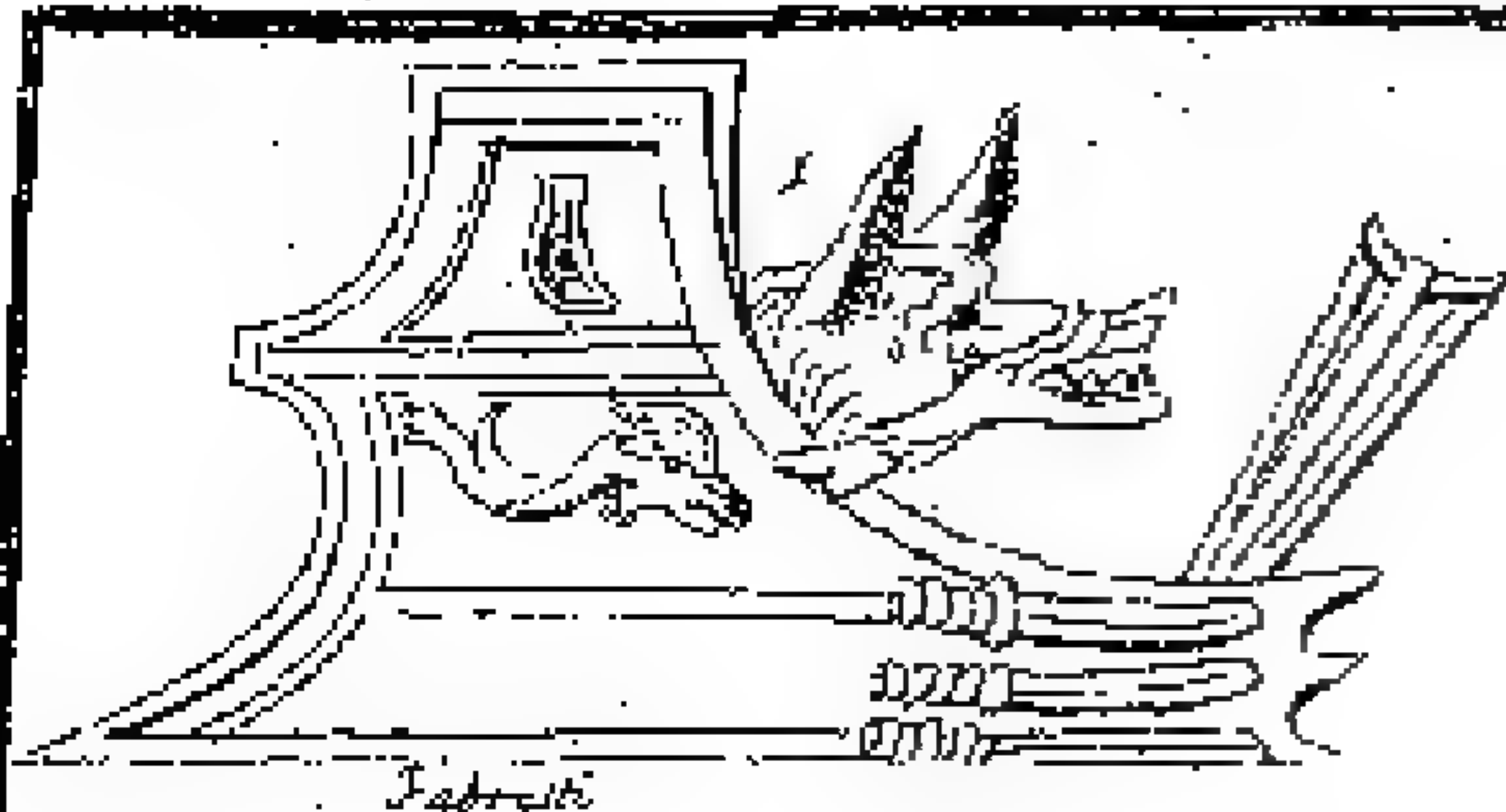
II. The Prow was that Part of the Vessel which advanc'd beyond the Keel, in the upper part of which was what the *Greeks* call'd ἀκροστόλιον or κόρυμβον. The Beak of the Ship, or *Rostrum*, as the *Latins* call'd it, was yet lower, between Wind and Water as it were, and was a kind of prominent Beam pointed with Brass, and sometimes with Iron. The *Greeks* call'd this ἐμβολον, and the *Latins* also *Embolus*; but for the most part *Rostrum*. The Epithet of a Ship was very frequently χαλκίμβολον, which is as much as to say a Ship furnish'd with a Beak of Brass; the *Rostra* being indeed pointed either with Brass or Iron. These Beaks, *Pliny* says, were thus pointed with Brass or Iron, to annoy the Enemy's Ships with. *Vitruvius* also, speaking of the battering Rams, says they had Beaks of Steel in the same manner as great Ships had. The Ram there spoke of is the Engine they us'd in Sieges, a Description of which we have seen above.

PLATE XLIV. We have here exhibited three elegant Prows, taken from the Marble Bas-reliefs in the Church of S. *Laurence* without the Walls of *Rome*, and which were

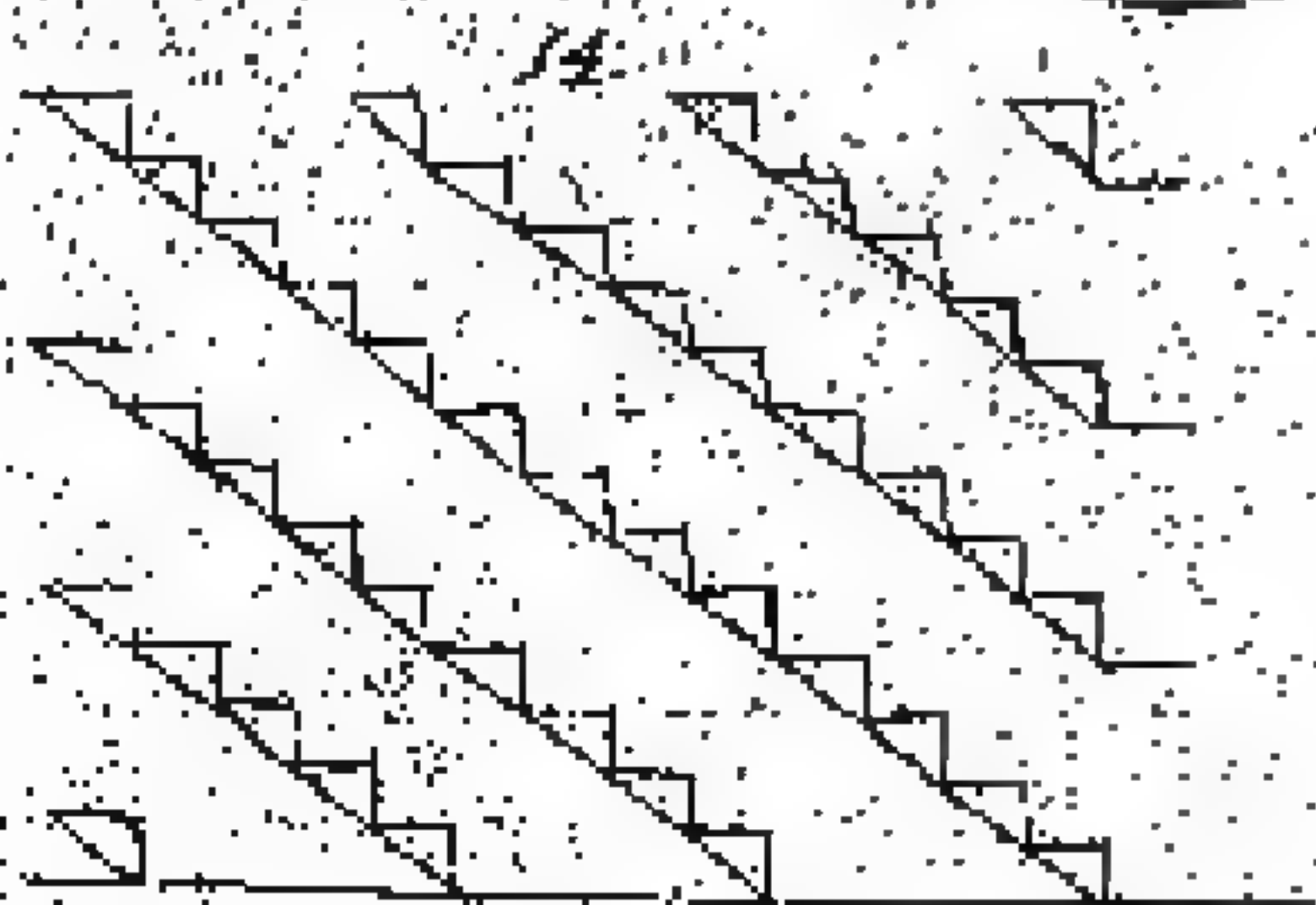
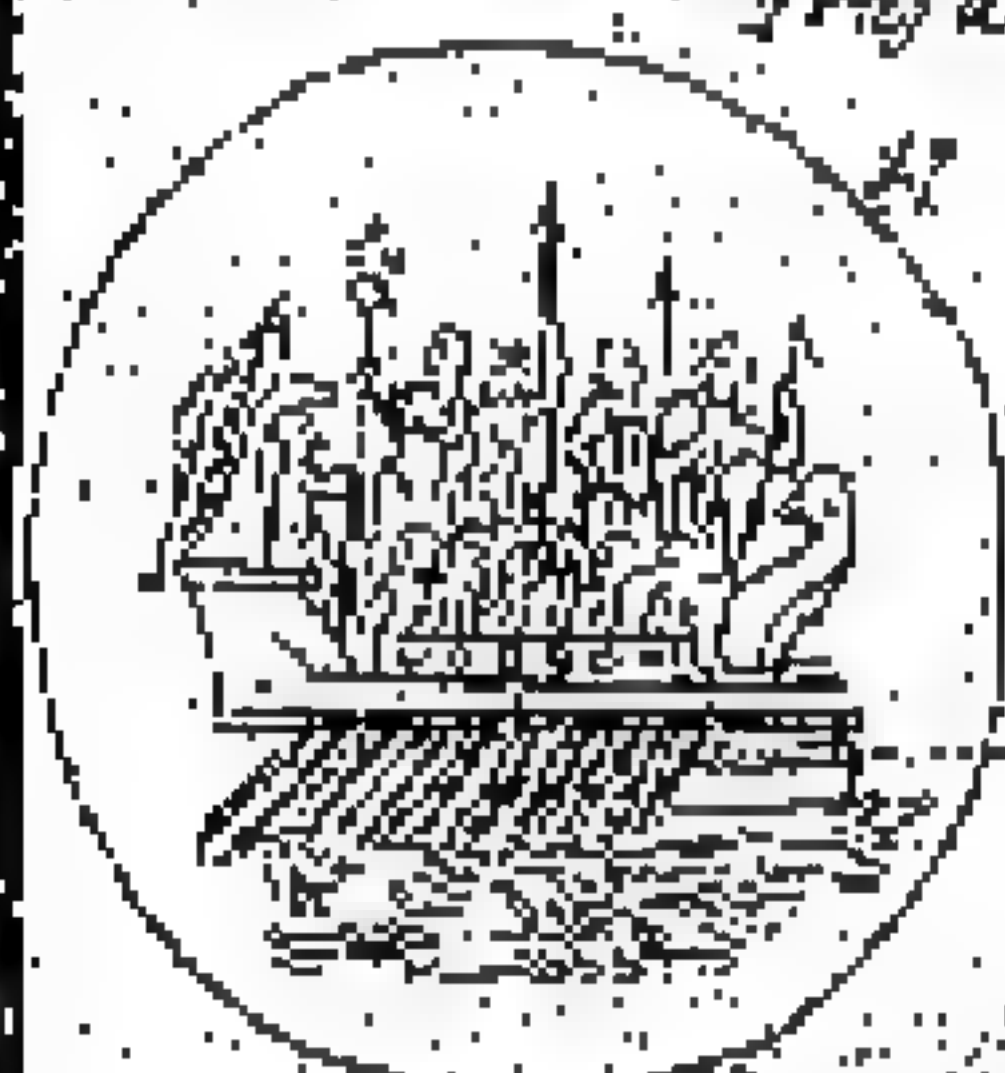
- 1 publish'd by M. *Fabretti*. The first has for its Mark a Dolphin's Head¹, and for another Ornament the Head of a wild Boar enrag'd. Upon the Beak are three drawn Swords, and the Beak it self divided into three Points: But whether these Points ought to be taken for three different Beaks, I confess I cannot pretend to say, tho' there were in some Vessels two or three, and sometimes seven Beaks, as the Vessel of *Ptolemy's* for Instance, which shall be describ'd below. In other Vessels also we meet with two or three Beaks, but all distinct and separated from one another. The three Prows in this Plate have in like manner three Swords, and a Beak with three Points. There is also in this and in the two following Prows a large Eye, on the other side of which there was doubtless another Eye, which two great Eyes were without doubt there plac'd to make the whole Prow represent the Head of some monstrous Animal; not unlike which we shall see some hereafter. The second Prow has for a Mark a Sea-horse², which we shall meet with again in others oftener than once. Upon the *Rostrum* or Beak is the Head of a Boar done by a good Hand. Above the Sea-horse is a *Mercury's* Head with his *Petasis* and Wings. It was customary also to adorn their Prows with the Images of some Deity or other, as shall be again observ'd below. The Mark or Ensign of the third Prow is a *Triton* winding a Horn³, and carrying upon his Shoulder an *Aplustre*, or Ornament that belong'd to the Poop. On the top of this Prow there is seen the Head of some Deity, which seems to be *Minerva*. The Head of an Animal that appears upon the Beak is not distinguishable. These Heads of Animals oftentimes serv'd for the *Rostrum* or Beak it self; but here they are plac'd too far back to have serv'd for that purpose. In this Plate there is represented what the Ancients call'd the *Aplustre*⁴, and was us'd to be plac'd at the Poop; of which kind of Ornament we shall have frequent Occasion to speak.

- 5 Another ancient *Rostrum* or Beak here given⁵, has the Figure of a Boar's Head: It was found in the Year 1597, in the Port of *Genoa*, as they were cleansing it, and is still preserv'd in the Arsenal of that Republick, with an Inscription which gives Testimony to the Time and Place where it was found: 'Tis made of Brass, and is about three Foot long, and a Foot and a half broad.

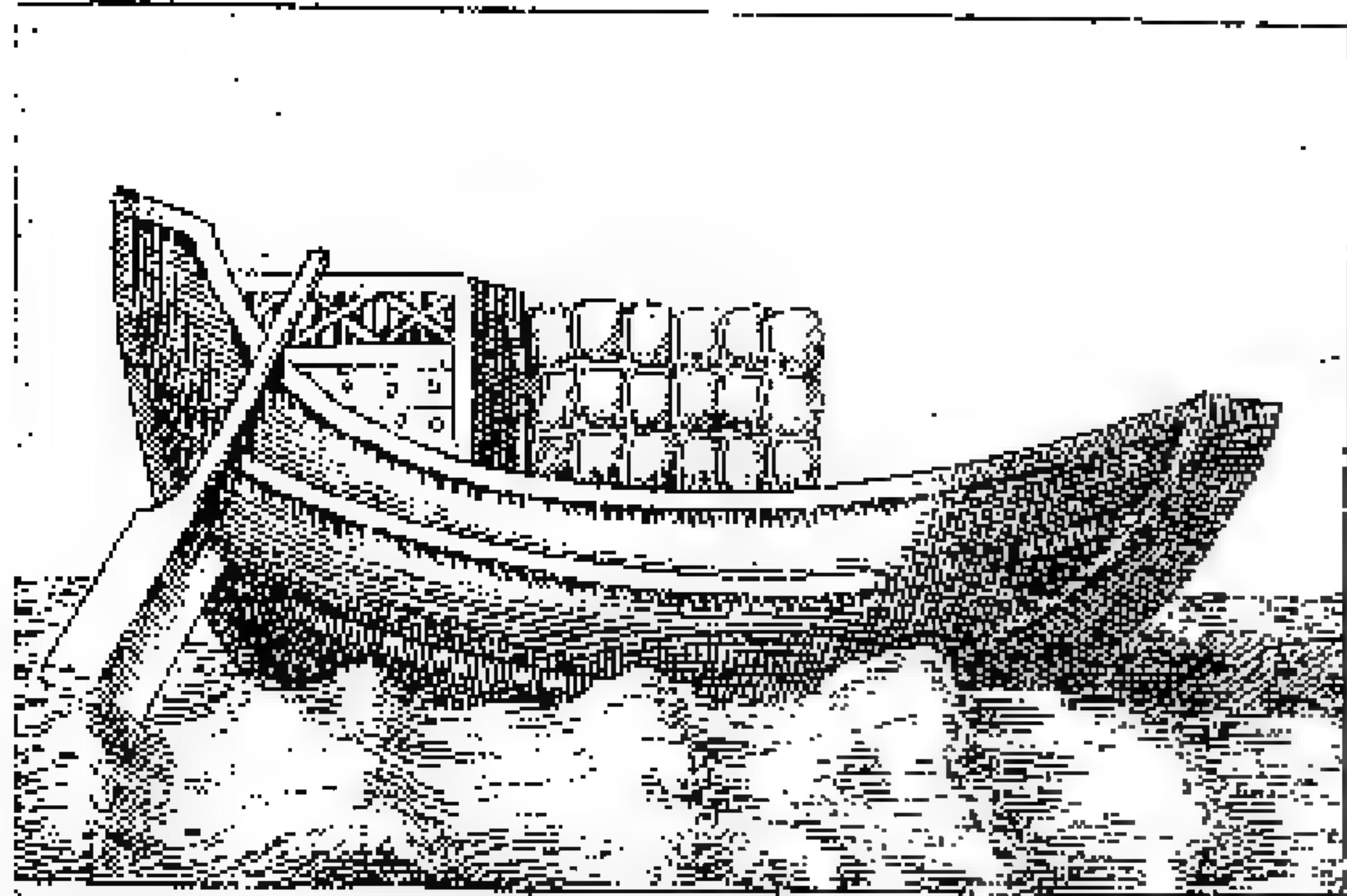
- 6 III. There is in the same Plate⁶ another Prow with a Beak or *Rostrum*, publish'd by *Beger* in his *Brandebourg Thesaurus*. Of this kind were the Prows which they consecrated to the Gods by way of Thanksgiving for naval Victories obtain'd over the Enemy. But their Ships had sometimes several Beaks, as has been already observ'd, which serv'd for a sort of offensive Arms, to annoy the Enemy's Ship with; of which kind was that of *Ptolemy*, a Description of which shall be given below. *Beger* is of Opinion that this Prow, which we have here exhibited after him, had three Beaks or *Rostra*, which were, according to him, those three small



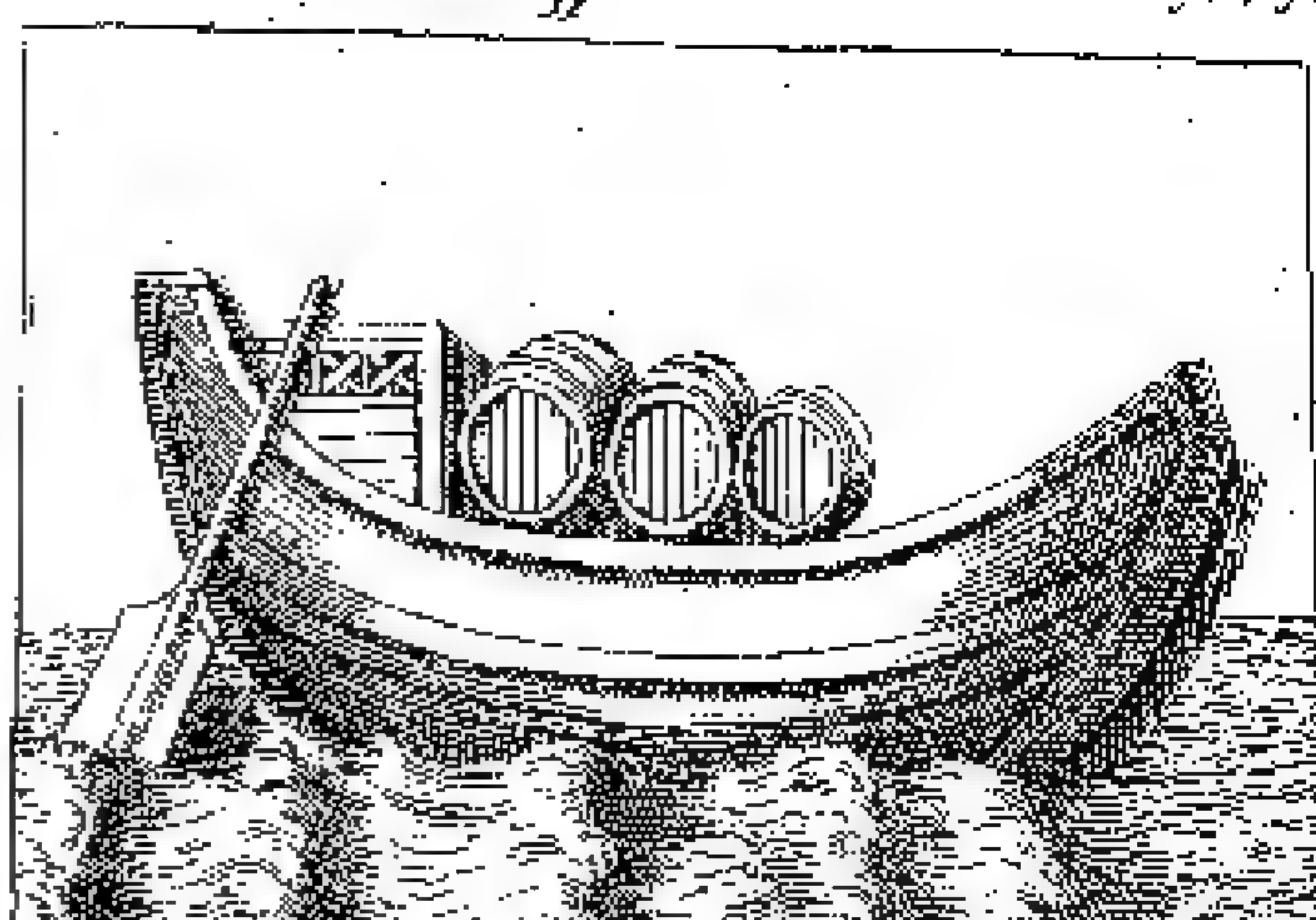
Gregory's Pillar



Gregory's Pillar



Trojan's Pillar



Trojan's Pillar



Trojan's Pillar



Trojan's Pillar



small Points that appear below; but these, by his leave, have more the Air of some Ornament than of *Rostra*: Besides, in the naval Combat represented below, there's a Ship, or rather several, which have two or three *Rostra*, very different from these small Points.

IV. The following Ornament is what they call'd an *Aplustre*⁷, which they us'd 7 to place at the top of the Poop, as we are told by *Pollux*, who calls it ἀπλάστον. *Eustathius*, *Homer's* Interpreter, says that this was an Ornament made of large Boards or Planks well wrought, by which the Form of the *Aplustre* is shewn, as it often occurs on Medals. We also see one exactly like this in one of the Ships in the naval Combat represented below. Many of the Learned are of Opinion that the *Aplustre* was a sort of Streamer plac'd at the Poop, which floated with the Wind. Whether any of the ancient Authors ever understood the Word in this Sense, I know not: But this I am sure of, that many have taken it for an Ornament of the Poop.

V. A certain learned Antiquary takes the following Ship⁸, represented in this 8 Plate, for that of *Cleopatra*, sailing upon the River *Cydnus* under the Form of *Venus*, accompanied with certain little Boys, which resemble so many *Cupids*. As for my part, I take it to be quite another thing, tho' what I have to advance, I offer only by way of Conjecture. I should rather think that the Woman we see standing in the Ship, and holding a large Veil over her Head, is *Aurora* rising out of the Sea: For in this manner *Aurora* is commonly represented; yet so indeed as that her Head appears beyond the Veil. We have already seen *Aurora* with a Genius accompanying her in an Image of the *Morning*, exhibited in the third Volume. Of the *Genii* that are here represented, two are standing upon Rocks, out of the Ship, one of which plays upon a Guitar, and the other points at something with his Finger; and two more are in the Ship, one sitting upon the Poop blowing a Trumpet, and the other seeming to climb up the Mast. In my Opinion therefore this is *Aurora* rising out of the Sea, attended by *Genii* to congratulate her; but as this is no more than Conjecture, so I submit it to the Judgment of the learned Reader.

VI. The other Extremity of the Ship was the Stern or Poop, call'd by the *Greeks* *Prymna*, which was the Place the Pilot sat in to steer the Vessel: There also stood the Master or Commander of the Vessel, whose Business was to overlook all the rest. The Extremity of the Poop was call'd by the *Greeks* ἀπλάστον, and by the *Latins*, *Aplustre*, of which notice has been taken already. After all, the several Particulars we have been describing were not always uniform; but were nevertheless most commonly found in great Vessels. Some of these things too are not without their Difficulties, but have various Opinions advanc'd concerning them, as will be seen in their proper place.



CHAP. V.

I. *The Division of Vessels into Ships of War and Ships of Burthen, into long Vessels and round Vessels.* II. *The Division of long Vessels into light Vessels, and others only long.* III. *Vessels that were the Medium between the long and the round.*

I. **V**ESSELS were divided into two sorts, namely into Gallies, and into those that sail'd with the Wind; the last of which were a sort of Merchant-men and Transports, and the first Men of War. That however did not hinder but that the Men of War sometimes us'd Sails, and the Merchant-men Oars, which for that Reason were call'd by the Greeks ἐπικωπα. Thus *Diodorus Siculus* says that 'they had five hundred Vessels, reckoning the Vessels of Burden and Gallies, the Points of whose Prows call'd *Rostra* were of Brass.' The Ships of War are also very often call'd in Authors long Ships, and by that Name are distinguish'd from Ships of Burden; and when the Ancients speak of Fleets, they generally tell us they were compos'd of so many long Ships, meaning thereby Men of War, and so many Ships of Burden, call'd in *Latin*, *Naves onerariæ*; which last were for the most part either round or oval. This Distinction of Ships into long and round Vessels we meet with in several Authors, as in the Interpreter of *Thucydides*, and in *Athenæus*; upon which Occasion the last mention'd Author relates a Jest of a certain Person call'd *Stratonicus*, who being ask'd which sort of Vessels he thought the securest, the long or the round, made answer, those which came safe to Land.

II. Long Ships were again divided into two sorts, those call'd *Actuariæ Naves*, and those that were simply long. What they call'd *Actuariæ Naves*, were a sort of light Vessels like our Brigantines; of which sort there were some small ones, call'd by *Cicero*, in his Epistle to *Atticus*, *Actuariolæ Naves*, which he sometimes names by the number of *Scalmi*, (as they call'd them) or Pegs against which they pulled their Oars in rowing: The same Author in another place gives the Name of *Actuariola* to some light Vessels with ten *Scalmi*, by which he means a sort of Gallies with ten Oars. *Plutarch* also calls a twelve Oar Vessel, which *Cæsar* imbarc'd at *Brundisium* to cross the Sea in, πλοῖον δωδεκάσκαλμον, *Navigium duodecim scalmorum*; which same Boat *Suetonius* calls a very small one, *parvulum Navigium*. Of these small Boats there were some that one Man row'd with two Oars, not unlike the Barks in the River *Seine*. Of this kind also was *Charon's* Boat, as we are inform'd by *Lucian* in his Dialogues, who introduces him saying thus: *Tho' old I yet work at the Ferry, and ply the Skulls with both my Hands.*

Tho' the Word *Triremis* is commonly us'd to signify a long Vessel with three Ranges of Oars, yet it is also sometimes taken for a small light Vessel with three *Scalmi*, or three Oars, one of which was on one side, and two on the other. They also gave them the Name of *Scaphæ*, as we find in *Diodorus Siculus*, who call a Boat with four Oars σκάφη τετραμερὴν, and in *Polybius*, who gives the Name of σκάφη πενταμερὴν to a Boat with five Oars, which had two on one side, and three on the other. These small Vessels were likewise call'd by the Names of *Cymba*, *Acatium*, *Celocium* and *Lembus*.

III. We have seen above the Distinction of Vessels into long and round; besides which there were others that participated of both these Forms, and were properly speaking neither long nor round: Vessels of this kind they call'd *Phaseli*, a
Descri-

Description whereof we have in *Appian* in these Words: ‘*Octavia*, says he, after having got leave of her Husband *Mark Anthony*, made a Present to her Brother of ten *Phaseli* with three Oars, *decem Phaselos triereticos*, that is, so many Vessels of a mixt kind, between the long and the round, or between Ships of War and Ships of Burden.’ These same Vessels call’d by *Appian* in this place *Phaseli*, are by *Plutarch* in the Life of *Mark Anthony* call’d *Myoparonæ*: For that Author relating the same Piece of History, says that *Octavia* prevail’d with her Husband to give her Brother twenty *Myoparonæ*, over and above what had been contracted for. These *Myoparonæ* were small Vessels, as *Scheffer* proves from several Passages in different Authors. *Cicero* calls them Pirate Vessels, *piraticos myoparones*, and says they were row’d with six Oars. The *Hemiolia*, call’d in Greek *Ἡμιολία* and *Ἡμιόλιον*, was also one of those light Vessels that made part of their Fleets, not unlike our small Frigats at this Day. The *Etymologicon* says that these were Pirate Vessels; and indeed it must be own’d they were very fit for that purpose, by reason of their Lightness and Celerity: Some of these had two, and some three Oars, and it’s thought that they were the very same thing with what they call’d *Cercurus*. We find a great Variety of Names given by Authors to these little Vessels, which often signify the same thing; as plainly appears where several Authors call the same Vessel, some by one Name, and some by another. And from hence it’s not unreasonable to think the like was done to many other Vessels, tho’ we do not meet with them express’d by different Names in Authors.

C H A P. VI.

I. Open Vessels, and those styled Cataphractæ; Images of open Vessels. II. The Lembi. III. The swift Myoparones. IV. The Liburnæ. V. The Skiffs, tyed to large Vessels.

I. THESE small Vessels were commonly call’d open Boats, because they had no Deck, as is certain from those they call’d *Cymbæ*, *Scaphæ* and *Lintres*. *Polybius*, who calls Vessels with Decks *κατάρακτα πλοῖα*, reckons the *Celoces* among those that had none, and calls them *κέλπας*. Nor had these small Boats any Beaks or *Rostra* at the Prow, which in naval Engagements they us’d to annoy the Enemy’s Vessels with. And of this kind I believe are those two following Images, which were both taken from *Trajan’s Column*. In the first of them⁹, which is loaden with Sacks of Corn, and which we therefore range among the Vessels of Burden, there appears to be no Beak: ’Tis also without Deck, and discovers only one Oar, tho’ it’s probable it has another, but conceal’d on the opposite side. The same thing may be said of the following Bark¹⁰, which two Soldiers are loading with Hogsheads of Wine.

II. The greater *Lembi* nevertheless had *Rostra*, as well as the *Myoparonæ* and *Hemiolie*. *Livy* takes notice of some of these small Vessels, which they us’d as a sort of Spy-Boats, which had no Beaks at the Prow, and calls them *sine rostris speculatorias*.

In the following Image¹¹ we see a Bark loaded with Wine, both without Deck and *Rostrum*. The other¹² however has a *Rostrum*, but no Deck, and has seven Oars on the side that appears, and no doubt as many on the other.

- 13 The following Vessel taken¹³ from the *Theodosian* Column, has also neither Deck nor *Rostrum*: 'Tis a Vessel of Burden made use of here for the Transportation of Soldiers, who appear all standing and well arm'd. Their Pikes seem longer than they generally are in this Column: There appears also a Standard, not much unlike our modern ones, floating in the Wind. This Vessel went by Sails only; but as the Mast and Cordage are cut to a certain height in the very Marble, the Sails by that means do not appear.

III. The *Myoparonæ*, according to *Valerius Maximus*, had *Rostra*, and were reckon'd by him among the Ships of War. *Polybius* also intimates the same thing of the *Lembi*, *Hermiolæ* and *Trierhemioliæ*, when he says that they pierc'd the Enemy's Ships, bore away their Oars, and did other Acts of Hostility, which things requir'd their Prows to be furnish'd with *Rostra*. These indeed were call'd light Vessels; but that was because they had no Decks, but were quite open, as has been before observ'd. *Livy* says it was evident that the *Celoces* and *Lembi* were Pirate-Vessels, forasmuch as that when they saw the Fleet afar off, they made the best of their way to get off, and had the better of the Fleet in Swift-ness, as being much lighter, and built for that purpose. *Florus* also speaking of the War against the Pirates, says that *Publius Servilius* was sent to attack them, and that tho' his Fleet was compos'd of large Vessels, and easily put these *Myoparonæ* in Disorder, which were light Vessels and fit for Flight, yet he bought his Victory very dear. There was generally in great Fleets a good number of these light Vessels of every kind, which they made use of for Spy-Boats, and in certain small Expeditions which requir'd Dispatch only, and also to give notice of the Arrival of the Fleet.

IV. The *Liburnæ* or *Liburnicæ*, so often mention'd in Authors and Inscriptions, are another kind of light Vessels, which the Romans made use of. They took their Name, *Appian* says in his *Illyrick* War, from the *Liburni*, a People of *Illyria*, who with certain light swift Vessels us'd to pirate in the *Ionian* Sea, and about the neighbouring Isles: Hence it was that the Romans call'd their light Vessels and those with two Oars, *Liburnæ* or *Liburnicæ*. *Lucan* says also that these were two-Oar Vessels:

Ordine contentæ gemino crevisse Liburnæ.


But this Passage of *Lucan* seems rather to signify that these *Liburnæ* were Vessels that had two Ranks of Oars, which does not very well agree with those small Pirate Boats, which they us'd for Scouts. Besides, the *Biremes* or Vessels with two Ranks of Oars, ought to be reckon'd among the long Vessels, these being oppos'd to such as they made use of for Scouts, of which kind were the *Liburnæ*. *Cæsar* says that he caus'd the Skiffs that belong'd to the long Vessels, together with the Scout-boats, to be fill'd with Soldiers. 'Tis therefore probable that these same *Liburnæ* or *Liburnicæ* were light Vessels, not with two Ranks of Oars, as *Lucan* seems to say, but with two single Oars only, as we have observ'd of other light Vessels, which were us'd for the same purpose: And for a Proof of this, *Stephen* of *Byzantium* calls them also *Liburnick* Boats. *Acron* the Interpreter of *Horace* says that the *Liburnicæ* were woven with Osier: But in this *Gyraldus* pretends he was mistaken; tho' what *Acron* says is supported by the Testimony of other Authors. Thus *Suidas* calls the *Liburnæ*, *Carabia*; which *Carabia*, as has been above observ'd, were woven with Osier. *Varro*, in *Aulus Gellius*, says that the People call'd *Liburni*, sow'd their Boats with Thongs. These *Liburnæ* were small Vessels, which serv'd in Fleets as a sort of Tenders to carry the Orders of commanding Officers, and which sometimes the Commanders themselves went aboard. Thus *Appian* says of *Octavius*, that before his Fleet engag'd, he went aboard

board one of these *Liburnæ*, and sail'd in it quite round the whole Fleet, exhorting and encouraging them to behave themselves valiantly. It ought here to be observ'd tho', that there were two sorts of *Liburnæ*, small and great, and that here we take notice only of the small ones. The *Etymologicon* says that a certain Vessel, whose Name was *Gaulos*, was a *Liburna*. Another light Vessel us'd in Piracy was call'd *Epaetroceles*, which is a Greek compound Word, and signifies a light Vessel loaden with Booty taken from the Enemy.

V. We learn from the Testimony of several Authors that the greater Vessels had little Skiffs fasten'd to their Poop, which they dragg'd after them. The ancient Glosses of the New Testament say that these Skiffs were made of Osier, and cover'd with Leather: Other printed Glosses have *Scapha*, and *Linter*. *Isidorus* also says that the *Carabus* was a Skiff made of Osier and cover'd with raw Hides. The Skiff or *Scapha* was also call'd in Greek ἐπολκή, because it was fasten'd at the Poop of a larger Vessel, and drawn after it: Sometimes also these Skiffs were taken into the great Vessels, as is the Custom at this Day.

C H A P. VII.

I. Light Vessels of the largest Size. II. Light Vessels used for War; III. Called Aphractæ. IV. Vessels of several Ranges of Oars one above another, called biremes, triremes, &c.

I.  OF the Vessels call'd *Actuariæ Naves*, some were of a larger size, and had some twenty, some thirty and some forty Oars. Those of twenty Oars had ten on each side, and were call'd in Greek εἰκοσόρες; that of thirty was call'd τετρακόντορες, and that of forty τεσσαρεκόντορες. These *Actuariæ* were so call'd from their Swiftness, they going, according to *Isidorus*, both with Oars and Sails. Vessels of this sort were not, however, of the same Length with those they distinguish'd by the Name of long Vessels, tho' they were sometimes arm'd and furnish'd with *Rostra*, as we learn from *Hirtius*, in his Book of the *Alexandrian Wars*. The Pirates, whose Care was to have Vessels of Speed, also made use of them for the most part: For they were generally open and without Decks, and were without *Rostra* too. *Polybius*, in a Passage cited above, opposes the thirty-Oar Vessels to the *Cataphractæ*, or close-deck'd Boats; and *Thucydides*, speaking of the *Trojan War*, says that the *Greeks* at that time had no *Cataphractæ*, but that their Ships were equipt after the manner of Pirate-Vessels.

II. The long Ships, or Vessels us'd in the Service of the War, were of two sorts; one of which had only one Rank of Oars on each side, but the other had two, three, four or five, and sometimes no less than forty; tho' these last by the way were more for Show than Use. Of the first sort, or those that had but one Rank of Oars, some had fifty Oars, and some more, half of which were on one side, and half on the other. The *Greeks* call'd the fifty-Oar Vessels πεντηκόντορες, and those with a hundred Oars ἑκατοντόρες. They were also call'd long Vessels, and were indeed a middle sort between the light ones which were less, and those with many Ranks of Oars that were larger. *Polybius* distinguishes them also into these three sorts, and reckons them in order according to their size: 'They made ready, says he, the rest of the Vessels, the *Triremes* or Vessels with three Ranks of Oars, the Vessels with fifty Oars, and the largest among the light Vessels.'

'Vessels.' This however was not always so: For we read in *Diodorus Siculus*, that it was found written in the Memoirs of *Alexander* the Great, that a thousand long Ships, bigger than the *Triremes*, were oblig'd to be built for the Expedition against the *Carthaginians* and others that inhabited about the Coasts of *Spain* and *Africk*. But this Passage may very well be understood in another Sense: For where 'tis said that the Vessels were larger than the *Triremes*, no more perhaps may be meant than that these were to be Vessels of four, or five, or more Ranks of Oars: And this Explication in my Opinion is much better than the other.

III. These long Vessels with one Rank of Oars, were call'd *Aphractæ*, that is to say, open and without Deck, by which Appellation they distinguish'd them from the *Cataphractæ*, which were close-deck'd Vessels. These *Aphractæ* had only towards the Prow and the Poop certain small Planks for the Convenience of fighting upon: They were not however all made after this manner, some of them being close deck'd, and furnish'd besides with *Roftra*. *Livy* says of *Octavius*, that having parted from *Sicily* with two hundred Vessels of Burden, and thirty long Ships, his Voyage was not equally happy; and that when he had arriv'd almost within sight of *Africa* with a prosperous Gale, he was on a sudden becalm'd; that the Wind chopping about afterwards all contrary, his Voyage was hinder'd, and his Ships dispers'd and scatter'd; and that it was with much a-do that he brought his Vessels with Beaks to bear up against the Waves by the Strength of Rowing. He here calls the Vessels *Roftrata*, or Vessels with Beaks, which before he had call'd long Vessels; and in another place says that some Vessels without Decks were nevertheless furnish'd with *Roftra*.

IV. The *Biremes* had two Ranks of Oars, the *Triremes* three, the *Quadrirèmes* four, and the *Quinqueremes*, call'd by the *Greeks* *Penteres*, five. The *Greeks*, who made the largest siz'd Vessels, and furnish'd them with more Ranks of Oars than others, call'd them by these Names. Those that had but one Rank of Oars were call'd *Moneres*; those with two *Dieres*; those with three, *Trieres*; those with five, *Penteres*; those with six, *Hexeres*; those with seven, *Hepteres*; and those with nine, *Henneres*. Besides all these, they had also others with a greater number of Ranks of Oars, of which hereafter.

C H A P. VIII.

I. *A Dispute concerning Vessels of several Ranges of Oars.* II. *These Ranges proved to be one above another.* III. *The Testimonies of several Authors; of Lucan, Silius Italicus, and the Scholiast of Aristophanes:* IV. *Of Thucydides, Appian, Polybius:* V. *Of Pausanias, Memnon, Pollux, Arrian, and Virgil.*

I. **T**IS a great Question, how these several Ranges of Oars were dispos'd. Some will have it that they were all upon a level, like ours at this Day, and found their Opinion upon I know not what Passage of some Commentator of *Aristophanes*, who, they say, thus expresses himself: 'The *Thranites* is he that rows in the Poop; the *Zygites* in the middle, and *Thalamites* in the Prow.' And these, say they, are the different Ranges of Oars, some of which are of the first, some of the middle, and some of the last Range: From which Passage we are given

given to understand, that they were not plac'd one above another; but were all upon a level. And this Opinion some learned Authors maintain, as *Baif*, *Stewechius* and others.

II. But *Scaliger*, *Scheffer*, *Palmerius*, *Fabreti*, and many more, are on the other side of the Question, and maintain that the Ranges of the *Biremes*, *Triremes*, *Penteres*, and others of what number of Ranges soever, were all situated one above another: And for this they produce so many ancient Testimonies of different Authors, that there seems to be no room to call the thing in question, and especially when ancient Monuments, particularly *Trajan's Column*, come to give in their Evidence, and represent these several Ranges of Oars one above another. But notwithstanding all this, all those that are skill'd in Sea-affairs say the thing is impossible: And so are all those I have ever talk'd to upon this Head, some of whom are Persons of the first Distinction, and acknowledg'd by all the World to be Masters of the Art of Navigation.

III. The Matter standing thus, I shall here produce from Writers all the several Passages which seem to prove, almost beyond Contradiction, that these Ranges were plac'd one above another, and at the same time represent the Monuments of Antiquity to corroborate the Matter.

Lucan, speaking of *Brutus's Ship*, says that the highest Oars reach'd the Sea at a great Distance.

-----*Summis longe petit æquora remis.*

Which Expression of highest Oars supposes that there were others of a lower Situation, which touch'd the Sea nearer at hand. The Passage of *Silius Italicus* is clearer: He says the Vessel took Fire above and burnt the whole Deck, and that the Men above left their Oars there, before those below so much as knew that the Vessel was on Fire.

*Intrat diffusos pestis Vulcania passim
Atque implet dispersa foros, trepidatur omisso
Summis remigio, sed enim tam rebus in arctis
Fama mali nondum tanti penetrarat ad imos.*

Which Passage cannot possibly be understood in another Sense, without manifest Violence to the Text: For it cannot here be said, with the least colour of Reason, that this is not meant of upper and lower Stations, but of different Parts only of the same Deck, seeing our Author expressly says that the whole Deck took Fire; so that how those below, which *Silius* expresses by *ad imos*, could be ignorant of the Fire, had they been upon the same Deck, is something strange. *Arrian* also speaking of a *Biremis* or Vessel with two Ranges of Oars, says that the lower Oars were not far from the Water: αὐτῶν τὰς κάτω κώπας ἐν ἐπι πολὺ ἐξω ἐχέσας τὸ ὕδατος. Which is clear as any thing can be.

Another very clear Proof is taken from the old Scholiast of *Aristophanes*, who says that the *Thalamacis* sat at the lower part of the *Triremis*, and that they had less Pay, by reason their Oars were short, if compar'd with those of other Ranges, and their Labour by consequence much less than that of others; that there were three Ranges in all, the lowest of which were call'd *Thalamitæ*, those in the middle *Zygitæ*, and the uppermost *Thranitæ*.

IV. *Thucydides* also tells us that the Commanders of the *Triremes* gave more Pay to the *Thranitæ*, because they row'd with longer Oars: Which Oars of the *Thranitæ*, *Dion* calls the exterior Oars, which cannot be understood of any than those that reach the Water at a Distance, there being none that could properly be call'd exterior, had they been all of the same Height, and upon the same Line.

The Author of the *Scholia* upon *Aristophanes*, distinguishes also in another place the Rowers into upper, lower and middlemost. Of the Rowers, says he, those that row above are call'd *Thranitæ*, those in the middle *Zygitæ*, and those below *Thalamitæ*.

Nor is *Appian* less clear in this Particular than the rest, who in his Book *de bello civili*, has these Words: Agrippa's *Arm*, says he, was upon Papias's Vessel, whose Prow he shatter'd, and broke her down to the Keel; insomuch that they who were in the Towers to defend her, were forc'd into the Sea; after which the Water coming in drown'd all the *Thalamitæ*; the rest sav'd themselves by swimming. We have seen above, that when the Deck of the Vessel was burnt, the *Thranitæ*, who were at the upper Range of Oars, quitted their Station, before the News of the Fire had reach'd the *Thalamitæ* who were at the Range below; whereas here on the contrary, the Water comes into the Vessel and drowns the *Thalamitæ*, while the *Thranitæ* sav'd themselves by swimming.

There is also a Passage in *Polybius* very remarkable. 'A *Deceres* or Vessel of Philip's with ten Ranges of Oars, which was then the *Prætorian* or *Admiral* Vessel, fell into the Enemy's Hands by an extraordinary Accident, which was this: A certain Vessel of that sort call'd *Trieremiolia*, happening to engage it, attack'd her in the middle, below the Range of the *Thranitæ*, pierc'd her, and stuck fast in her, insomuch that the Pilot could not get her off. Upon this there came up two *Quinqueremes* to attack this *Deceres*, who pierc'd her in two places and sunk her, together with all the Men that were in her, among whom was *Democrates* the Commander of Philip's Fleet.

V. *Pausanias*, in his *Atticks*, speaking of a Ship of *Delos*, says that he knew none preferable to it, and that from the Deck downwards it had nine Ranges of Oars; which Passage plainly shews that the Ranges were plac'd one above another.

But there is nothing clearer than a Passage of *Memnon*, cited and translated by *Palmerius*: 'A Vessel, says that Author, with eight Ranges of Oars call'd *Leontophoros*, was remarkable both for its Size and Beauty: For it had a hundred Men in each Range of Oars, so that it had eight hundred of a side, sixteen hundred in all.

'The *Triacontorus*, *Tessaracontorus* and *Pentecontorus*, or Vessels of thirty, forty, and fifty Oars, were so call'd, as we learn from a certain ancient Author of the *Tacticks*, from their number of Oars all on a Line; as were the *Uniremis*, *Biremis* and others from their number of Ranges dispos'd one above another: κατὰ τὰς εἰρηγας κατὰ τὸ ὕψος ἐπ' ἀλλήλοις.

All the Lexicographers also and Etymologists say, that among the Rowers in Ships, those that had the lowest Station were call'd *Thalamitæ*, those in the middle, *Zygitæ*, and those that were plac'd above, *Thranitæ*. Thus also *Julius Polux* has it: 'That Place, says he, may be call'd *Thalamus*, where the *Thalamitæ* row; that in the middle *Zyga*, where the *Zygitæ* row; and the Deck or place where the *Thranitæ* row, *Thranos*.

Nor is the Passage in *Arrian* less full to the purpose, where it is said, 'that the long Ships, whose Sides were not high enough to sustain the Impetuosity of the Waves in stormy Weather, were on that account the most damag'd; as were also the *Biremes*, whose lower Range of Oars were but little above the Surface of the Water, and by consequence could be of little or no Use in a Storm; for they receiv'd the Violence of the Waves upon their Sides, and were easily broken and shatter'd.

Virgil also plainly speaks of three Ranges of Oars one above another, where he says that the *Trojan* Youth were divided into three Bands, to row

row the Vessel, and that the three Ranges of Oars were plac'd one above another.

----- *Triplici pubes quam Dardana versu
Impellit; triplici consurgunt ordine remi.*

Where it is to be observ'd that *Versus* is here taken for an Order of Oars, as is also elsewhere frequently to be met with, and that *consurgunt ordine remi* must be meant of Oars rising one above another.

Lucan, also speaking of the *Triremes* and *Quadrirèmes*, has these Words:

----- *Valideque triremes
Quasque quater surgens extracti remigis ordo
Commovet.*

By which Expression of *quater surgens ordo*, nothing else can certainly be meant than that the four Ranges in the *Quadrirèmes* are plac'd one above another.

C H A P. IX.

- I. Another Scholiast of *Aristophanes* confuted, who had never seen any *Triremes*.
 II. There were no *Triremes* in the time of *Zosimus the Historian*. III. An Answer to them who assert the Impossibility of there being one Range of Oars above another. IV. The Vessels of King *Demetrius* with sixteen Ranges of Oars, not understood by those who saw them. V. The Ranges of Oars were not placed one perpendicularly over another.

I. **T**HE very many and clear Testimonies produc'd above, leave no room to doubt, but that the Vessels of the Ancients had really their upper and lower Ranges of Oars. But how full and clear soever these are, there are some learned Men notwithstanding, who maintain the contrary Opinion, which they partly found upon the Testimony of an ancient Author, or one pretended to be so, and partly upon the thing it self, which they say could never be in fact. The Passage upon which they found their Opinion, is taken, as we have already observ'd, from a certain Scholiast of *Aristophanes*, who, speaking of three Ranges of Oars, says that the place of the *Thranitæ* was at the Poop, that of the *Zygitæ* in the middle, and that of the *Thalamitæ* at the Prow. But here *Scaliger*, *Palmerius*, *Scheffer*, and many other learned Men with one Voice say, that this same Scholiast was a Man of a very late Age, and that he only spoke his own Conjectures upon the Matter. And what is more, the old Scholiast upon the same Poet, whose Words have been cited above, says plainly that the *Thalamitæ* were those that row'd at the bottom of the Vessel, the *Zygitæ* those in the middle, and the *Thranitæ* those that row'd above: Which Passage, as it is agreeable to the Testimonies of all Antiquity, and to those of the Authors of greatest Name produc'd, is sufficient to refute the pretended old Scholiast above-cited.

II. That Author had certainly never seen any *Triremes*, they having been out of use long before the younger *Theodosius*, as we learn from a Passage in *Zosimus*, an Author of that time. 'The *Liburnæ*, says he, are not less swift than the fifty-Oar Vessels, tho' they are much inferiour in that Respect to the *Triremes*, none of which have now been built of a long time. *Polybius*, continues he, has
 ' given

‘given us the Description of Vessels with six Ranges of Oars, made use of by the *Romans* and *Carthaginians* at the time they were at War together.’ But the Ignorance of this second Scholiast upon *Aristophanes*, appears in many other Instances, where he manifestly blunders, and which are too long to relate here.

Moreover, what he says is altogether absurd, that is, that the *Thranitæ* were plac’d at the Poop, and the *Thalamitæ* at the Prow: For in those Parts of the Ship there were never any Ranges of Oars, no more than in the Gallies at this Day, which all the World knows have their Oars elsewhere.

III. But after all, the Argument drawn from the Difficulty or Impossibility of such a Disposition of Oars, especially in Ships of fifteen, sixteen, thirty and forty Ranges, such as *Ptolemy’s* great Vessel was, taken notice of by *Athenæus*, a Description of which shall be given below; this Argument, I say, is plausible enough. The Oars of the *Thranitæ* in this Vessel were, they say, according to *Calixenus* thirty eight Cubits, or eight and forty Foot long; which is a very great Length, I confess: But notwithstanding this Length, how was it possible they could reach the Water, where there were forty Ranges of Oars one above another, tho’ we should allow but the Space of a Cubit between each Range, which would be plainly too little? Nay, these Oars could not possibly reach the Sea, tho’ they were put perpendicularly down. But then if we allow three Cubits for the Space between each Range, which seems as little as can be allow’d, there must then have been a hundred and fourteen Cubits, or a hundred and forty four Foot from the uppermost to the lowest Range of Oars, which is not only repugnant to common Sense, but also to the Description of *Callixenus*, cited by *Athenæus*. Again, if this Vessel was of such a monstrous Size, the Oars of thirty eight Cubits could then be of no use at all.

To this Argument the Answer is, that this Vessel of *Ptolemy’s* ought not to be brought for an Example, she being built, as *Plutarch* says, rather for Show and Ostentation, than Use, and could not be mov’d without Toil and Danger, so that she differ’d very little from a Structure built at Land. The same thing also may be said of *Hiero’s* Ship with twenty Ranges of Oars, which was forc’d to be tow’d to *Alexandria*, where she remain’d ever after, as it’s thought, unmov’d, as being of no Use but for a Spectacle; but of this Vessel more hereafter. *Livy* likewise speaking of a Ship of *Philip’s* of *Macedon*, says that she was of such an unwieldy Bulk, that she was almost useless, and that she had sixteen Ranges of Oars. But of *Ptolemy’s* and *Hiero’s* Vessel, much more might yet be said: But forasmuch as a Description of these will be given below, we therefore refer the Reader thither.

IV. It was not thus, however, with the Ships of King *Demetrius*, which had also sixteen Ranks of Oars: For these, *Plutarch* says, were as much to be wonder’d at for their Agility and Speed, as for their Magnitude: Which was owing to the Invention of that Prince, who had a Head, *Diodorus* tells us, admirably turn’d to mechanick Arts, and who invented many things altogether unknown to Architects. These Ships were the Admiration of the People in his time, who would never have believ’d such things could have been done, had they not seen them with their own Eyes. And this is the Case of many at this Day, who will not believe it, because they have not seen it; tho’ for my own part, altho’ I neither see it, nor understand it, yet I can much more easily believe it, than give the Lye to all Antiquity.

V. As to those that undertake to shew that such a number of Oars in so many several Ranges one above another, could never be, the Answer is, that it was indeed impossible in the way that they understand it, which is, that they were dispos’d in a perpendicular manner one above another; which in fact was not so,

as

as may be frequently observ'd in *Trajan's Column*, where in the *Biremes* and *Triremes* the lower Ranges are plac'd obliquely, and by Steps as it were.

C H A P. X.

I. *The System of Scheffer and Palmerius, who admit Ranges of Oars one above another, quoted, and confuted by M. Fabreti.* II. *M. Fabreti's System for sixteen Ranges of Oars.* III. *Difficulties in this System.*

I. **S**CHEFFER and *Palmerius*, who are of Opinion that these Ranges of Oars were plac'd one above another, tho' obliquely, and as it were by Steps, have given us a Figure to explain the manner of such a Disposition. But this Opinion of theirs *Fabreti* not only relates but refutes, and afterwards explains the thing as he understands it, giving us also a Figure of it agreeable to his Explication. Some, however, will find Difficulties attending his System, as well as he did in the System of others: And for my own part, I shall neither espouse one side or the other, nor yet attempt to give a new System; but content my self with relating what *Fabreti* has said, both in Refutation of the Sentiment of preceding Authors, and in Confirmation of his own. Take his Words therefore at large.

Our third Answer is, that as we know, not by Conjecture, but by Examples, which we see both in *Trajan's Pillar* and in Medals, that the Oars were not perpendicularly plac'd one above another in the *Triremes*, in which a greater Space was allow'd to every Rower than in greater Vessels, but were dispos'd obliquely, and as it were checkerwise, so in Vessels of sixteen Ranges of Oars they might be dispos'd yet more obliquely, as *Scheffer* and *Palmerius* reason, whose Image of a Vessel with sixteen Ranges of Oars I have here given, supposing those that exceed that Number to be either fabulous or useless. 14

I do not at all wonder that this Image of *Scheffer's* or *Palmerius's* appears so absurd to their Adversaries, seeing that it is reckon'd defective even by those that espouse their side of the Question, by reason of the small Space they allow between the Oars mark'd with the Letters B D E. For, according to *Palmerius*, the Height of the Seat A B being a Foot and a quarter, and the Breadth B C a Foot and three quarters, the Hypothenuse A C will be almost two Foot two Inches, which Space would not be enough for the smallest Oars of little Barks to move in without clashing with one another.

II. But if the Space between A C, which is the place of the lowest Range, and the Range next above, be three Foot at least, as in the following Figure, the Breadth of the Seat will then be thirty two Inches, or two Foot eight Inches: Which being granted, the Height of a Foot and a quarter repeated fifteen times, (for so often it must be repeated, if we reckon from the Hole of the Oar F down to the lowest Range I, as may be seen in the Figure) this Height, I say, being fifteen times repeated, the sixteen Ranges will be eighteen Foot nine Inches high perpendicular, to which if we add five Cubits, or seven Foot and a half from the *Thalamus* or lowest Range to the Water, the perpendicular Line from the highest Range, which is that of the *Thranita*, to the Surface of the Wa-

ter, will be six and twenty Foot three Inches. If therefore the *Thranita*, when he works his Oar, immerses it three Cubits deep in Water, and by that means makes an Angle equal to the half of a right Angle, the Hypothenuſe from the place of the *Thranitæ* to the Water will then be near seven and thirty Foot; to which if we add eight Foot and a half, which I think is ſufficient for the Handle of the Oar, and four Foot and a half for the other end of the Oar under Water, the whole Oar will then be fifty Foot long; a very great Length I confeſs, but by no means enormous or unmanageable, eſpecially if ſome little Artiſtice was uſ'd to help to work it; as was done with the Oars in *Ptolemy Philopator's* Ship, which were ſeven Foot longer than this, and work'd nevertheleſs with Eaſe, by the Help of a little Lead in the Handle to poiſe them with, in Conſideration of which it is that I have ſuppos'd the Handles ſo ſhort.

I ſhould think, however, according to this way of explaining the Matter, that the Rowers, and eſpecially the *Thranitæ*, took no long Stroke with their Oars, by reaſon the Length of the Handles and their Nearneſs to one another would not allow it; but that they contented themſelves with making a very ſmall part of a Circle in the Water, little more than juſt plunging the Oar in, and pulling it out again, as they do at this Day in the Gallies, when they are oblig'd to put back and row towards the Poop. For altho' ſuch ſhort Strokes ſeem not very fit to make the Veſſel move briskly, yet the great number of Oars, which were two hundred and forty on each ſide, of which by and by, and the quick Repetition of the Strokes, abundantly compensated for the want of longer; to which we may add, that the ſhorter the Strokes were, the leſs they were ſubject to claſh together, which might very eaſily happen where there was ſuch a multiplicity of Oars.

I will alſo venture to ſay before-hand, that Veſſels of this enormous Bulk generally carried Sails, and were chiefly driven by their Help, as we learn from *Silius Italicus*, whoſe Verſes we ſhall be oblig'd to repeat; where, deſcribing a Ship of extraordinary Bulk, he ſays, that ſhe went briskly in the middle of the Fleet, when the Wind fill'd her Sails, and on the contrary but ſlowly when ſhe was only row'd:

----- *Veloque ſuperba capaci*
Cum rapidum hauriret Boream, & cornibus omnes
Colligeret flatus, lento ſe corpore agebat,
Intraret fluctus ſolis ſi pulſa lacertis.

From whence it appears, that ſo great a number of Oars was intended rather for Pomp than Uſe, and perhaps to denote too the Burden of the Ship. 'Tis probable alſo, that to prevent the Sea entering in at the Holes through which the Oars were put, they ſhut them up as ſoon as they had done rowing; and forasmuch as the Weather cannot be ſuppos'd to have been always favourable enough, ſo as that they might uſe all the ſixteen Ranges of Oars at once, but that on the contrary it often happen'd that they could not uſe them all, ſo it's not at all unlikely that they took them for the moſt part alternately, ſometimes alſo leaving the lower Ranges untouch'd, both to prevent Confuſion, and to hinder the Ship's taking in the Sea at the Holes, when the Weather was rough and boiſterous; from whence it will follow that they never made uſe of all the Ranges, but when the Sea was calm, and all the Holes could be ſafely open'd, and their Oars move freely without being daſh'd upon one another by the angry Waves.

15 We here preſent the Reader with a Figure, where the Seats of the Rowers in a right Line are ſloping and inclining as they ought to be, and where the Diſtance

stance between the *Scalmi* is agreeable to our System, according to which, in a Length that falls short of the *Venetian Gallies*, (to which *F. Fournier* attributes fifty Ranges of Oars, and compares them to the ancient *Deceres*, or Vessels of ten Ranges) in a shorter Length, I say, there is room for fifteen Oars to be plac'd in the same Range at F G H, &c. so that under every fourth Range there is a Rower plac'd perpendicularly from him that's four Ranges above, that so he may have a sufficient Space above him, which will be three Cubits and half a Foot, and which, according to *Palmerius*, is enough in reason for a Man sitting. By this Means we shall be able to explain a Passage in *Vitruvius*, which otherwise will hardly be intelligible, that is, that by the Space between the Rowers the Dimensions of the Ship may be known: *ex interscalmio invenitur symmetrica navis ratiocinatio*. For as the Space allow'd here between the Rowers, F G H, &c. which is ten Foot eight Inches high, denotes the Ship to have sixteen Ranges of Oars, so that Space being diminish'd, and the Seats by consequence making a less acute Angle, we may conclude the number of Ranges is less, and consequently the Vessel less.

III. This System of *Fabreti's* seems something obscure, especially towards the Conclusion; and the Image he gives us is more difficult to comprehend, than that of *Palmerius*, which yet he sufficiently refutes. His System is also attended with some Difficulties: And many, I suppose, will think it impossible for a Man to work an Oar of fifty Foot long in so small a Space as he assigns for that purpose: For the *Interscalmium* allow'd by him is no more than two Foot eight Inches, and the Handle of the Oar, or that part of it that's within the Vessel, is according to him, eight Foot and a half, and how a convenient Stroke can be taken in so narrow a Compass, is more than I can understand. Then as to the Ranges of Oars, tho' they are not in the same Line, yet are they not rais'd above one another more than a Foot and eight Inches, which gives them no more room to row in than if they were situated in a right Line. How these Difficulties can be got over, I know not; but this I am sure of, that those that are skill'd in Navigation will find yet more in this System, and will look upon the thing as impossible.

For this Reason therefore I think we had better abide by what has been already said, namely, that as these Vessels of *Demetrius* were the Wonder of the People, both for their Bulk and Agility, People too that had both seen and consider'd them, we who have not seen them may very well sit down, and not waste our time in attempting to describe the Order, Disposition and Dimensions of them.

C H A P. XI.

I. Unwieldy Vessels, and those which exceeded five Ranges of Oars, esteemed of none or very little Use by the Ancients. II. Whether the Ancients placed above one Man to each Oar, even in the largest Vessels; Scaliger's Opinion confuted. IV. That of M. Fabreti more plausible. V. The Biremes and Triremes had but one Man to an Oar.

BESIDES these Vessels of *Demetrius's*, which are the only large ones that appear to have been of any real Use, all the other Vessels of Bulk taken notice of by Writers, whether of sixteen, twelve, ten, nine, or but of six Ranges of Oars, were so unwieldy, that they were of little or no Service to those that had

had them; but on the contrary were sometimes of Disservice. Thus *Livy* tells us that *Philip* of *Macedon's* Ship of sixteen Ranges of Oars was so very unwieldy, that it was entirely useless, and was even the Occasion of the Loss of some Battles. We have also seen above another Vessel of ten Ranges of Oars, which having once lost its Movement could never be *worked* again with all the Art of the Pilot, which prov'd the Cause of its Destruction. *Florus* also speaking of *Mark Anthony's* Fleet, equipt against *Augustus*, says that it was compos'd of twenty Ships from six to nine Ranges of Oars, besides which they were furnish'd with Decks and Towers; insomuch that they resembled Cities and Castles, and made the very Sea groan with their Weight; that the Winds could hardly make them move, and that, in short, their enormous Bulk was the Cause of their Ruin.

II. 'Twould be to little purpose to enquire how the Vessels of a less number of Oars could make their way through the Billows; seeing all that can be said would amount to no more than Conjecture, and be subject to a thousand Difficulties. I shall therefore wave that, to come to another Question, namely, whether in those great Vessels there was only one Man to an Oar, or whether they rather had not many, as they have in our Gallies at this Day. *Scaliger* and *Scheffer* are for the first side of the Question, and *Fabreti* for the second. Now the Cause of this Diversity of Opinions among Authors is, that the ancient Historians have said nothing clear enough to decide the Question. *Scaliger* founds his Opinion upon the above-cited Passage from *Mnemon*, who says that a Vessel of eight Ranges of Oars, call'd *Leontophoros*, had a hundred Men to each Range, and that on each side of the Vessel, so that there were in all sixteen hundred Men to row. But this Passage, *Fabreti* says, is of no great Service to *Scaliger's* Opinion, in as much as *Mnemon* does not say there that there was but one Man to an Oar; which indeed is true, but it must be own'd notwithstanding that, this Passage has some Difficulty in it: For if there were a hundred Men to each Range, and several worked only one Oar, there were then as many Men at an Oar in the *Thalamus* or lowest Range, which almost touch'd the Surface of the Water, as there were in the highest, which was the place of the *Thranitæ*, who using very long Oars had by consequence a much more laborious Task than the other, which therefore does not appear to me with a Face of Probability. It cannot then be denied that this Passage is attended with some Difficulty; yet for all that, I can very easily believe, that in these Vessels of so many Ranges of Oars, there was more than one Man to an Oar, at least in the uppermost Ranges.

III. *Scheffer* tells us at once that the Question here does not at all concern the small Vessels with only one Range of Oars, nor the light Vessels such as were the *Myoparones*, the Testimonies concerning these being too plain and clear for any one to pretend there was more than one Man to an Oar. Thus the Scholiast upon *Thucydides* says that the *Triacontoros*, or Vessel of thirty Oars, had thirty Men: And thus the Etymologicon also, where it's said that the *Pentecontoros*, or Vessel of fifty Oars, had fifty Men. The Question therefore concerns only the Vessels that had several Ranges of Oars. And here *Scheffer* thinks that the same may be said of these, as of the other, that there was but one Man to an Oar; to support which Opinion of his, he produces the Testimonies of some Writers: Thus he tells us that *Silius Italicus* says, that the *Quinqueremes* or Vessels of five Ranges of Oars, had four hundred Oars, and that *Pliny* asserts of the *Quinqueremes*, that she had four hundred Rowers; so that there was therefore but one Man to an Oar: From whence he argues, that if it was so with the *Quinqueremes*, much more must it be so with the *Quadriremes*, *Triremes* and *Biremes*, or Vessels of four, three and two Ranges of Oars. Another Proof produc'd by him, is, that the *Thranitæ*, or the Men that row'd at the upper Range, had better Pay than those that

that work'd at the lower Ranges, by reason that their Labour was harder, as they work'd with Oars of a much greater Length: For had they not work'd singly, continues he, but had others to assist them and share in the Labour, for what Reason should they be allow'd better Pay than those that rugg'd the Oar alone, who had at least as hard, if not harder Labour than those whose Work was divided? After which he concludes, that how great soever the Vessel was, there was but one Man to an Oar. In particular Cases, however, he allows there might be more Men to an Oar, as when the Business requir'd Expedition and Dispatch.

But *Fabreti*, who defends the contrary Opinion, says that *Scheffer's* is liable to more and greater Difficulties than the former: For how can a single Man, in one of the Vessels we have been speaking of, manage an Oar of fifty Foot long, which he can hardly be suppos'd able to stir out of its place? He also adds, that the Passage cited out of *Silius Italicus* does not at all serve the Purpose of *Scheffer*: For that Poet only talks of a Vessel of uncommon Bulk, the sight of which was even astonishing, and that they had never seen any thing like it in the Coasts of *Africk*; which Vessel, he adds, had four hundred Oars, and a great number of Men to labour at them, sail'd very well when the Winds were favourable, but went but softly when she was only row'd.

*Medias inter sublimior ibat
Terribilis visu puppis, qua nulla per omnes
Egressa est Libycis major navalibus ævum.
Sed quater hæc centum numeroso remige pontum
Pulsabat remis; veloque superba capaci
Cum rapidum hauriret Boream, & cornibus omnes
Colligeret flatus, lento se corpore agebat,
Intraret fluctus solis si pulsa lacertis.*

In these Verses, *Fabreti* says, the Poet speaks nothing of any Ranges of Oars, or that this was a *Quinqueremis*, or Vessel of five Ranges; but that on the contrary, according to the Sense of that Poet, there ought to have been a greater number of Ranges, since it was both larger, and a kind of *Admiral* Vessel, and because in the same Fleet there were *Hexeres*, or Vessels of six Ranges, as the same Poet observes.

*Quæ Sidonios vultus portabat Elise
Bis ternis ratis ordinibus grassata per undas.*

IV. To this *Fabreti* might have added, that the very Terms of *Silius* seem to denote, that the number of Oars were not equal to that of the Men. The Vessel, says he, had four hundred Oars and a great number of Men to row; which Words seem plainly to signify that the number of Oars were not equal to that of the Men. If then the number was not equal, that of the Men ought certainly to exceed that of the Oars, forasmuch as in a Vessel of that Bulk, one Man can never be suppos'd to have manag'd two Oars, whereas one Oar could very well admit of more than one Man.

Fabreti also argues, and that very well, that the Silence of Writers upon the number of Men to an Oar, is no sufficient Reason for asserting that there was but one Man to an Oar. Nor is that all, for he goes yet farther, and thinks that he has found an Example which proves that there was more than one Man to an Oar, namely, in the *Tacticks* of the Emperor *Leo*, the Son of *Basilius*, where it is said that every *Dromon* ought to be of a convenient Length, (where by *Dromones* are meant light Vessels for Speed) and to have two Ranges of Oars, an

upper and a lower Range: After which at some distance he adds, *that there ought to be fifty Men at the lower Range, and a hundred and fifty at the upper Range of Oars, all arm'd for fighting.* 'Tis not to be doubted, says *Fabreti*, that those of the upper Range were design'd both for rowing and for fighting; seeing that when any of them died, the Loss was supplied from the lower Range. *If you find (says Leo a little lower,) that any of the Soldiers are wanting in their Duty, send them down to the lower Range of Oars; and if any one is killed or wounded, let his Place be supplied from the Range below.*

But all this is of no great Weight to prove that there was more than one Man to an Oar: Nor indeed does *Fabreti* pretend that these Passages are concluding. All therefore that they teach us, is, that in the time of the Emperor *Leo* there were *Biremes* or Vessels of two Ranges of Oars, one rais'd higher than the other, whether the Use of them continued down to his time, or that he was the Restorer of them: For *Zosimus* the Historian, who in the Passage above-cited says that the *Triremes* had been a long time out of use, speaks not a Word of the *Biremes* or Vessels of only two Ranges of Oars, some higher than others.

V. As to my own Opinion about the number of Rowers, it is this: I believe that both in the *Biremes* and *Triremes* there was but one Man to an Oar, and that, in the upper as well as in the lower Ranges. We also see clearly in the *Biremes* and *Triremes* of *Trajan's* Column, not only that there is but one Man to an Oar, but also that things are there dispos'd in such a manner that there could be no more: And thus also it is more intelligible how some Ranges of Oars were higher than others. But then as to the *Quadriremes* and *Quinqueremes*, I dare not venture to say whether there was more than one Man to an Oar, or not: Only thus much I think may be said, that in Vessels of an enormous Size, where the Ranges were very numerous, it is hard to conceive how one Man amongst the *Thranitæ*, or even of some of the lower Ranges, was able to manage one of those great Oars by himself.

B O O K III.

Containing a Description of the Vessels of several Ranges of Oars; and of those of an extraordinary Size.

C H A P. I.

I. What Vessels, with several Ranges of Oars, were of a proper and convenient Size, according to Vegetius. II. The Biremes distinguished into two sorts, the greater and the less. III. The Origin of the Biremes. IV. The Biremes called Bicrota by Cicero.

I. *VEGETIUS*, speaking of the *Liburnæ*, says that they are of different Bulk, and that the least of them have one Range of Oars; that there are some a little larger, which have two Ranges; that those of a moderate Size have three or four, and sometimes five Ranges or Degrees of Oars, (*remigum gradus*) which

which confirms what has been before observ'd, that in these Vessels of several Ranges of Oars, the Ranges were always plac'd one higher than another, for so the Word *gradus* in this place plainly signifies. To this *Vegetius* adds that the Bulk of a Vessel of five Ranges of Oars ought not to be thought enormous, seeing that at the Battle of *Actium* there were much larger Vessels, namely of six and more Ranges. But then these larger *Liburnæ*, says he, had their Skiffs to attend them, a sort of small Vessels with about twenty Oars of a side, call'd by the People of *Great Britain* painted Skiffs, which serv'd as Scouts, to discover the Enemy's Motions, and to surprise and take their Store-ships: And to prevent these Scout-boats from being discover'd at a Distance, the Sails and Cordage were died the Colour of the Sea, as were also the Mens Cloaths; and of this Colour too was the Wax they us'd to caulk the Vessel with, and all this that they might not be perceiv'd either by Day or Night.

II. Of Vessels of this kind, which *Vegetius* calls Vessels of convenient Dimensions, we shall speak in Order, and begin first with the *Biremes*, or Vessels of two Ranges of Oars. In the early Ages they knew nothing of this sort of Vessels with several Ranges of Oars, but had nevertheless very long Vessels, tho' but one Range of Oars, how many soever they were in number. *Diodorus* tells us that *Liparus*, who liv'd before *Æolus* and *Jason*, was the Inventor of these long Vessels: But *Pliny* shews that there was a great Diversity of Opinions hereupon, and tells us that *Philostephanus* makes *Jason* the first that sail'd in a long Vessel; that *Egesias* attributes the Invention thereof to *Paralus*; that *Ctesias* attributes it to *Samyras*; *Saphannus* to *Semiramis*, and *Archimachus* to *Ægeon*. But forasmuch as the Invention of them is referr'd to the fabulous Ages, there is nothing certain to be expected from thence. As to the *Biremes* however, it's certain, according to *Thucydides*, that they were not in use at the time of the *Trojan War*. *Pliny* also tells us from *Dymastus*, that the *Erythreans* were the first that hit upon the Invention.

III. *Scheffer* has plainly evinc'd that the Word *Biremis* is us'd by Writers in a double Sense, sometimes to signify a small Skiff with only two Oars, and sometimes a large Vessel with two Ranges of Oars. In the first Signification *Lucan* understands it, where he speaks of a *Biremis* that was not a long Vessel:

----- *Quem contra non longa veſta biremi*
Appulerat ſclerata manus-----

In which Sense he also takes it, where he speaks of *Cleopatra's* saving her self in a small *Biremis*:

----- *Se parvâ Cleopatra biremi*
Corrupto caſtode Phari, laxare catenas,
Intulit Ematiis, ignaro Cæſare, teclis.

Where it is to be observ'd, that what this Author calls *parva biremis*, *Plutarch*, in the Life of *Julius Cæſar*, calls ἀκάτιον μικρόν, a small *Acatium*, which is nothing else but a Skiff; and so also *Horace* call a *Biremis*:

Tunc me biremis præſidio ſcaphæ.

IV. But of these small *Biremes* it is not our purpose to speak in this place, but of those greater ones only which were provided with a double Range of Oars, one above another. And these are they which are thought to be meant by the Word *Dicrota*, made use of by *Cicero*, who, speaking to *Atticus*, thus expresses himself: I had, says he, the *Aphracla* of the *Rhodians*, the *Dicrota* of the *Mitylenians*, and some Vessels with Oars: Ἀφρακτὰ *Rhodiorum*, & *Dicrota Mitylenæorum*

rum habebam, & aliquid ἐπιείκων. And in another place, *Nam & ipse Domitius bona plane habet Dicota: Domitius* also has good *Dicota*. What the *Aphracta*, mention'd in the Passage above, were, we have elsewhere observ'd.

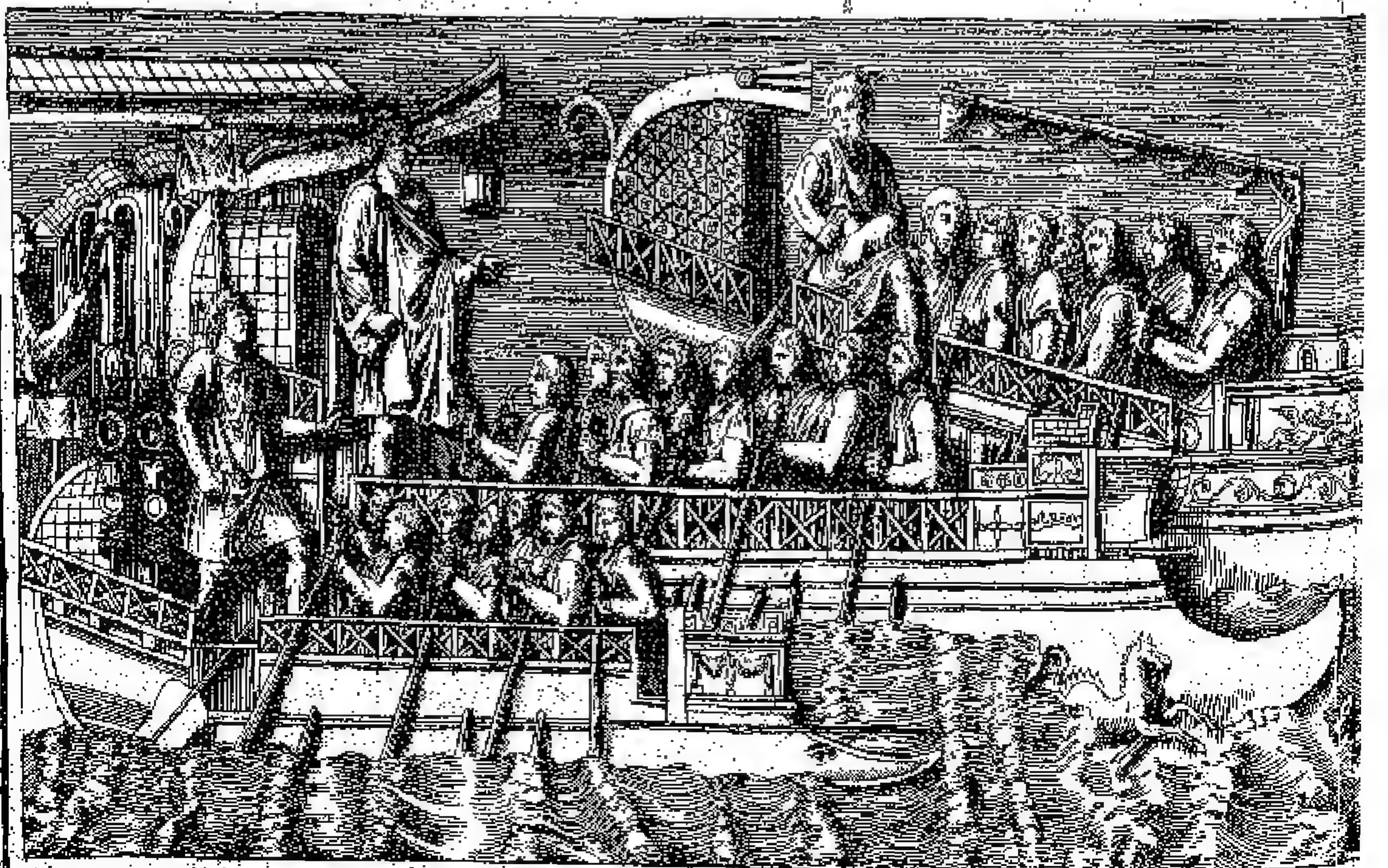
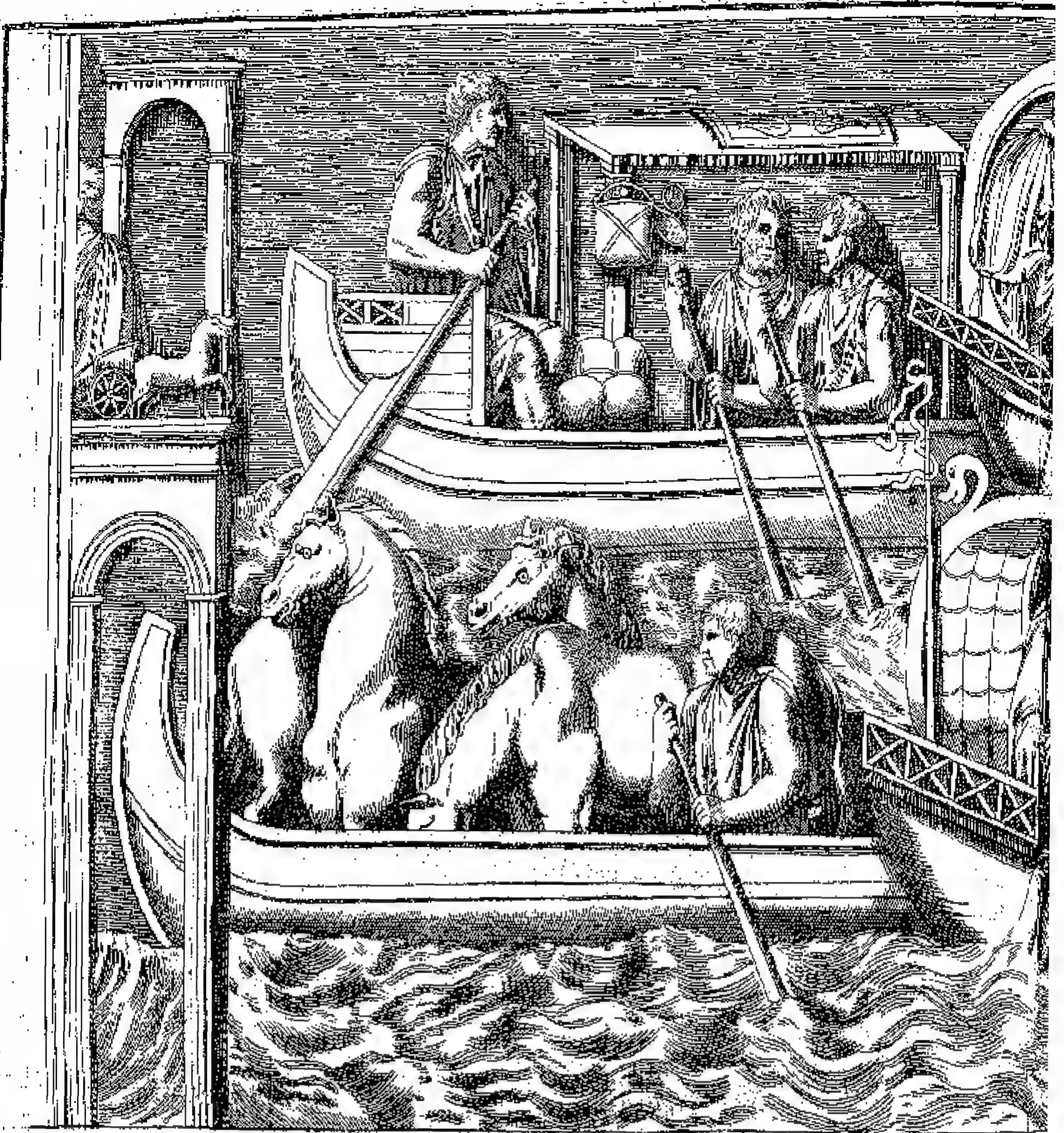
C H A P. II.

I. Images of Biremes in Trajan's Pillar. II. Three Rostrums belonging to the same Prow. III. Biremes represented on Medals. IV. Other Images of Biremes.

Plate 44. I. **T**RAJAN's Pillar affords us a good many *Biremes*, among which those
16 two exhibited in this Plate¹⁶ are very remarkable: The Oars of the two Ranges are dispos'd in a kind of Checker-work, which confirms what has been above observ'd concerning that Disposition. A kind of Ballustrade is plac'd along both sides of the Vessel, and the Men above, call'd *Thranitæ*, hold their Oars in the void Spaces between the Ballisters. If we might depend upon the Image, this Vessel was open and without Deck, but it has been already observ'd more than once, that with regard to Measure and Proportion, no Exactness is to be met with, except in the Figures of Men and Horses, which are there excellently well design'd, all the rest being carelessly and inaccurately express'd, without the least Regard had to the Proportion and Dimension of things: Thus we have already seen in the very same Point of Sight, Houses lower than Men, and those Houses with Doors which the Man could hardly get his Leg through: Some of the Stories in them are also less than a Foot high. We have likewise seen Tents so disproportion'd, that the Man laid down therein, would have one half of his Body without in the open Air: And here we have a very high Tower of several Stories, which yet will hardly contain one of the Men we see in the Ship: It seems to be a Watch-tower or Light-house at the Entrance of a Port; nay, it's probable this is the Port where these Ships are arriv'd. In the first *Biremis* we see but six Oars in each of the Ranges, but we are not to think for that Reason that this was the whole number; the Architect having all along represented things much less in proportion than they were, the Men excepted, and by consequence given us here only a part of the Oars for the whole.

II. The Vessel here whose Prow has three Beaks or *Rostra*, is a Man of War: The middle Beak terminates in a Ram's Head, of which sort we shall see many in a naval Combat to be exhibited hereafter. We see at the Poop a Cabin so very small, that there is hardly room for a little Boy to go into it, which also agrees with what we have just above observ'd. The *Aplustre* at the Poop, which winds about the Cabin, is of a very simple Form; and one may observe, that at the uppermost Beak of the Prow there's a piece of Cloth fasten'd on one side to the Prow, and on the other to the Beak, so that the Wind, when it blows, does not make it flutter like the Streamers in our Ships.

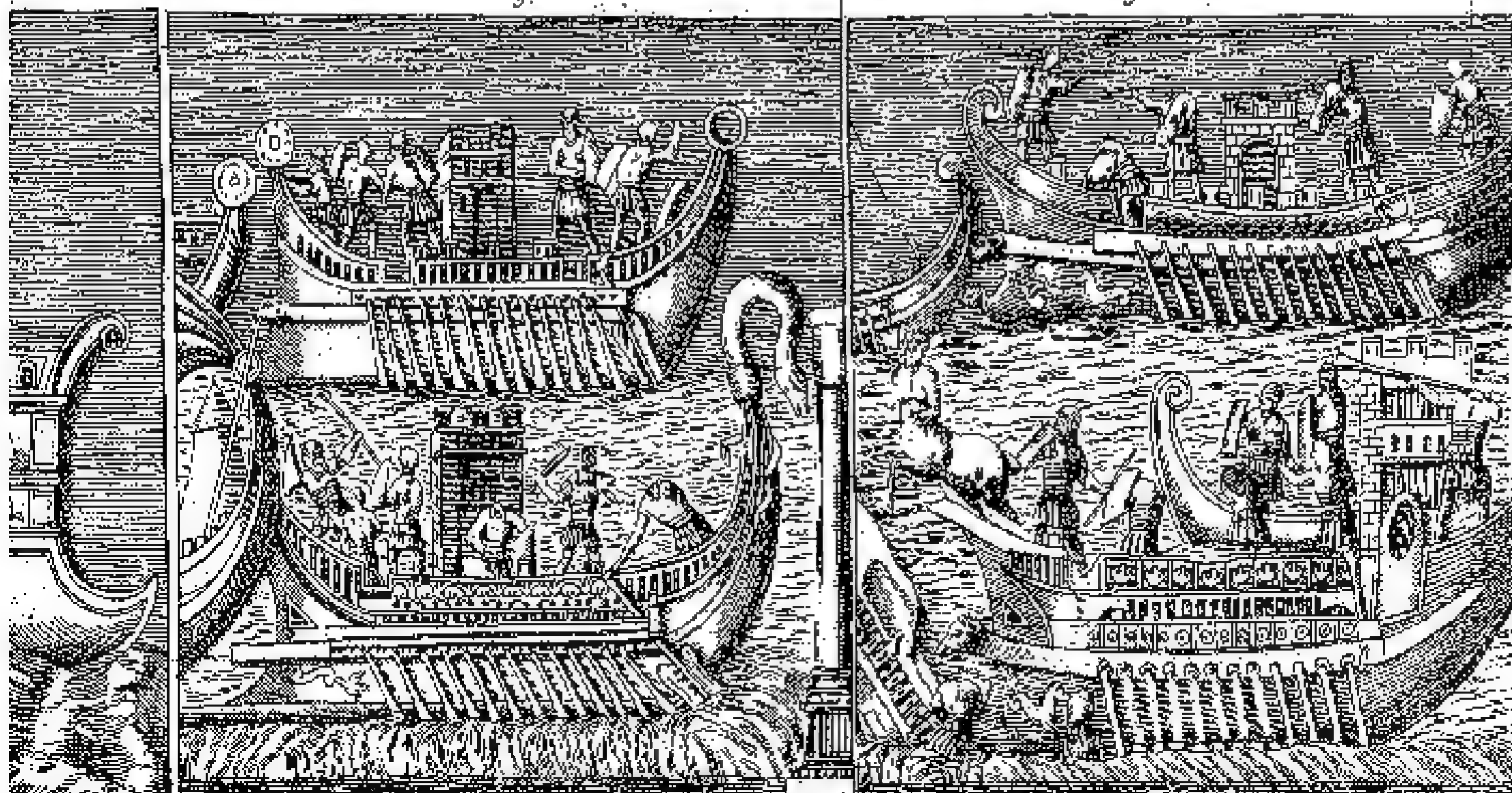
III. M. *Fabretti* has given us four Medals, in which the two Ranges of Oars one
17 above another are plainly distinguish'd. The first¹⁷ was design'd from a Medal of
18 the King's by M. *Octavio Falconieri*: The second¹⁸ was taken from the Cabinet of
19 the late Cardinal *Carpegna*: The third¹⁹ was sent him design'd by *Spon*; which Medal, he says, was very much worn, tho' the double Range of Oars distinctly ap-
20 pears in it: The fourth²⁰ was from the Cabinet of Cardinal *Ottoboni*, who was after-
wards



Trojan's Pillar.



Dr. Piller



D. Emanuel Marli

wards Pope. To these he adds another taken from the Cabinet of Cardinal *Campagna*, where he pretends one may see distinctly four Ranges of Oars; but this is so very ill done in his Book, that one can hardly distinguish the Oars at all, for which Reason I have not thought fit to give it a place here.

At the Image 14 of this Plate we have exhibited the Figures which *Palmerius* and *Fabreti* have given us, where each of them describe, according to their different Notions, the Situation of the Rowers in King *Demetrius's* Vessels of sixteen Ranges of Oars, together with the Letters us'd by each of them to explain the thing, and prove the Probability, or at least the Possibility of their System.

IV. In the following Image²¹, taken from the same Pillar, the Vessels are before a Town, whose Amphitheatre and other Buildings may be perceiv'd. The largest Vessel is also a *Biremis*, in the highest Range of which the Men hold their Oars in a Ballustrade: The Disposition of the second is the same with what we have seen above, that is, they are plac'd sloping, and not perpendicularly under the other: Nor indeed could they be so plac'd, there being not space enough between the upper and lower Range to allow it. The *Aplustre*, which is upon the Cabin at the Poop, very much resembles that we have before exhibited in this 133d Plate. On one side this *Biremis* there's a Vessel of Burden, which they are actually loading with Sacks of Corn.

Another Plate exhibits also four Vessels¹, the two first of which seem to be only two large Barks loaded. The first of them is very remarkable, for its high Deck or Covering, supported by four Pillars, which I do not remember ever to have seen before in ancient Monuments. Upon one of these Pillars there hang some Kitchen Utensils, as a Kettle, Ladle and Cullender. Another large Bark is freighted with Horses for Transportation. The other two Vessels seem to be *Biremes*, tho' there are many Oars wanting in the lower Range; but this may have happen'd either thro' the Carelessness of the Graver, or else may have fallen thro' the Injury of Time. 'Tis observable both in this and the following Image, that there is but one Man to an Oar, even in the uppermost Range; which may also be observ'd in the *Triremis* exhibited below, where the *Thranitæ*, who have much longer and heavier Oars, are nevertheless but one Man to an Oar.

PLATE
XLV.
1

C H A P. III.

I. The *Cheniscus* placed on the Poop of Vessels. II. What the *Tropis* was. III. *Triremes*, and their Origin. IV. *Triremes* taken for Vessels of War, in general. V. An Image of a *Triremis* on Trajan's Pillar.

I. UPON the Poop of one of these *Biremes* we see the *Cheniscus*, (*χενισκος*), an Ornament plac'd by the Ancients in that part of the Ship, according to *Lucian*, who says, that the Poop rises gently in a sort of Curve, and has a golden *Cheniscus* upon it. This *Cheniscus* has the Head and Neck of a Goose, call'd in Greek *χην*, and is observable not only in this Vessel, but in many others also of the following Plates. 'Tis always in the Poop that we see this *Cheniscus*, taken notice of by *Lucian* in the Passage above, and in another also in the second Book of his true History, where his Words are, that the *Cheniscus* or *Anserculus*, which was at the Poop, extended its Wings. The Etymologicon notwithstanding places it upon the Prow, tho' it is there said that others place it at the Poop: The

Words are these: 'The *Cheniscus* or *Anserculus* is part of the Prow, at which the Anchors are hung, and which is also the Beginning of the Keel. Some indeed think that it's rather the top of the Poop, to which the Parts of the Ship are join'd and fasten'd. 'Tis call'd *Cheniscus* or *Anserculus*, from its having the Head of a Goose upon its Summit, that so the Ship may in some sort be said to resemble a Goose; which perhaps is done by way of *Omen*, to prevent the Ship's sinking, and that it may swim like a Goose without Danger.' What the Etymologicon here says of the *Cheniscus* being at the Prow, may perhaps have sometimes been so: For tho' the Ships which Antiquity has transmitted to us have it always at the Poop, yet others, not come to our Hands, might perhaps have it sometimes at the Prow. *Apuleius* however, speaking of *Isis's* Ship, mentions its being at the Poop. *The Poop*, says he, *with its Cheniscus, of a large Circumference, was adorn'd with Leaves of Gold, all bright and shining.* What he here says of the Circumference of the *Cheniscus* at the Poop, we shall see below in a naval Combat.

II. 'Tis to be observ'd, that the Word in the above-cited Passage of the Etymologicon, which we have translated Keel, is in the Greek *τέβης*, which Word signifies the Beam at the bottom of the Vessel, which ploughs and divides the Sea, as the Scholiast upon *Homer* interprets it. This Beam, however, was only in large Vessels, and was shap'd in such a manner, as to cut thro' the Waves; for flat-bottom'd Vessels had no such thing.

III. The *Triremes* were also very much in use among the Ancients for Ships of War; nay, so common they were among them, that the Word *Triremis* was very often us'd in general to signify Ships of War, whatever their Bulk or number of Ranges of Oars were. Sometimes indeed we find the Word *Triremis*, tho' very seldom, us'd to signify a small Boat with three Oars; as in *Plutarch*, for Instance, in the Life of *Theseus*. It was also decreed by the common Consent of the *Greeks*, that no Man should make use of a *Triremis* that would hold more than five Men; which kind of *Triremis*, *Plutarch*, in the Life of *Paulus Æmilius*, calls *πλοῖον τρικαλμον*, a small Boat with three Oars, two of which were on one side, and one on the other. The Word *Scalmus* means properly the place for the Oar to work in.

The *Triremis*, or Vessel with three Ranges of Oars, was invented, according to *Herodotus*, by *Aminocles* a *Corinthian*; which *Thucydides* also says, but more at large: 'Twas at Corinth, says he, that the first *Triremes*, that ever were seen in Greece, were built, and it's reported that *Aminocles* a *Corinthian Ship-builder* built four of them for the *Samians*. He also adds, that from that time to the time he wrote in was three hundred Years, and that the oldest Sea-Fight he knew any thing of, was that of the *Corinthians* with the *Corcyraeans*, which was two hundred and sixty Years before he writ, *Diodorus Siculus* says also that *Aminocles* was the Inventor of the *Triremes*; but he probably took it from *Thucydides*. *Pliny* likewise says the same thing, and cites *Thucydides* for his Author: Nevertheless *Clemens Alexandrinus* attributes the Invention thereof to the *Sidonians*.

IV. The *Triremes* being the most common among the Ships of War, it thence came to pass, as has been already observ'd, that they generally call'd all their Ships of War by that Name, how great soever they were: Thus *Zonaras*, speaking of the Peace between the *Romans* and King *Philip*, says that the Conditions were, that *Philip* should deliver to the *Romans* all his Elephants and *Triremes*, except five, and that the principal of them, which was one of sixteen Ranges of Oars, should be also deliver'd up. *Hesychius* also simply defines the *Triremis* to be a Ship of War; and the Scholiast upon *Aristophanes* in like manner calls Ships of War in general by the Name of *Triremes*: And thus perhaps *Cicero* ought to be

be understood, where he says, that he caus'd a great Ship to be built that resembled a *Triremis*.

V. In the following Image² we see the Emperor *Trajan* on board a *Triremis*, accompanied with two *Biremes*; which *Triremis* is every way bigger than the other two. Here it is that we so plainly distinguish the three Ranges of Oars dispos'd in a kind of Checker-work. The *Thranitæ*, who, as we have often observ'd, are the Rowers at the uppermost Range, are here but one Man to an Oar, and from the manner of their handling the Oar, it appears that they could not be more than one. If therefore the *Thranitæ* were but one to an Oar, it will follow *à fortiori*, that none of the lower Ranges were more, forasmuch as their Oars were less, and by consequence less laborious. On the side of the *Rostrum* there's a Sea-horse represented by way of Ornament. This Vessel appears to have a Deck, upon which the Emperor *Trajan* is walking. Many of the Ships of War were provided with Decks, and were call'd in Greek, *Cataphracti*, but in Latin, *Constrata Naves*. The Deck however was properly what they call'd *Catastroma*, or *Constrata Navis*. Other Ships of War had no Deck, and were call'd, as we have already observ'd, *Aphracti*; some of which were nevertheless very great. Thus *Arrian* tells us, that very long Vessels were order'd to be built, both *Aphracti* and *Cataphracti*. The Fleets were also commonly made up of these two sorts of Vessels: To this Purpose *Polybius* tells us that twelve *Cataphracti* were made ready, and eight *Aphracti* or open Vessels. *Pliny* also says that the *Thasii* were the first that invented long Ships with Decks, and that anciently they only fought at the Prow and the Poop.

This *Triremis*, which we see exhibited in this Plate, has behind the Poop the *Cheniscus* bending as before observ'd; another of which we have also in another Vessel in the same Plate. At the end of the *Aplustre*, which extends it self a good way from the Poop, there's a kind of Vase, which I take to be a Lanthorn, the Man with a Torch in his Hand shewing that it was then Night. The Emperor *Trajan* has here his Winter Habit on, as well as in other Places of the Column. There is in this *Triremis* the Standard of the Cavalry, as in the *Biremis* below there are some military Ensigns of the Legions. Upon the Beak of this *Biremis* is a large Eye, that the whole *Rostrum* may appear like the Head of some Animal. In the other *Biremis* one may see a Sail furl'd and fasten'd to a long Pole, to be let loose upon Occasion: It has also at the Poop a *Cheniscus*, and an *Aplustre*, not unlike that we have seen in the former Plate. As to the other Ornaments of these Vessels, they will be easily observ'd with the Eye.

C H A P. IV.

I. The *Liburnæ*, according to *Vegetius*. II. He seems to assert, that the *Liburnæ* were different from the *Triremes*. III. Inscriptions which mention *Trieres* or *Triremes*, and their Names; IV. the *Liburnæ*, and their Names. V. The Distinction between those Gods which were called *Tutela*, and those which gave their Names to the Vessels.

I. **W**E have already observ'd that the *Liburnæ* or *Liburnicæ*, which were the same thing, were taken for a sort of small light Vessels built for Speed, and to serve as Scout-boats, but not us'd in Naval Combats. The Ro-
mans

mans however made use of the *Liburnæ* for Ships of War, and that in great numbers too. *Vegetius* takes them also sometimes for Vessels of the largest Size, where he says that the *Liburnæ* were of various Magnitudes, the least having but one Range of Oars, others a little larger two Ranges, and others again of more large and convenient Dimensions, four or five Ranges. The same Author says also a few Chapters before, that at the Battle of *Actium*, where *Augustus* beat *Mark Anthony*, chiefly by means of the *Liburnæ*, they learnt by Experience that the *Liburnæ* were more fit for Combat than other Vessels; and that from that time the Emperors gave their Ships of War both the Form and Name of the *Liburnæ*, and compos'd their Fleets of them. These Roman Fleets had their Station, one at *Misenum* in *Campania*, to guard the *Tyrrhenian* Sea, with a Præfect to command it; and another at *Ravenna*, commanded also by another Præfect. Each of these had ten Tribunes under him, and each *Liburna* had its own Commander call'd *Navarchus*, whose Office, among other things, was to exercise every Day the Pilots, Rowers and Soldiers.

II. We find in many sepulchral Inscriptions, mention made of the Soldiers of both these Fleets, where the *Trieres* or *Triremes* seem to be distinguish'd from the *Liburnæ*. The *Trieres* or *Triremes* are signified in those Monuments by this Mark III. as M. *Fabreti* has fully made appear in his *Trajan's Pillar*. And thus the following Inscription ought to be read, which was found at *Puteoli*, and publish'd by *Fabreti*.

D. M.

TI. PETRONI. CELERIS

NAT. ALEX. EX. III. ISID. VIX.

ANN. XL. MILL. ANN. XVII. TITI.

US. AQUILINUS. EPIDIUS PANSÆ III. ISID.

H. B. M. FECERUNT.

The meaning of which is in *English* this: 'To the Gods *Manes* of *Titus Petronius Celer*, Native of *Alexandria*, and Soldier in the *Trieris Isis*, who liv'd 'forty Years, and serv'd in the War seventeen. *Titius Aquilinus* and *Epidius Pansa*, who serv'd in the same *Trieris*, erected this Monument in Memory of their 'Friend.' *Diis Manibus Titi Petronii Celeris natione Alexandrini ex Triere Iside vixit annis quadraginta, militavit annis septemdecim. Titius Aquilinus, Epidius Pansa trieris Isidis hoc bene merenti fecerunt.*

III. 'Tis to be observ'd that these *Triremes* often carried the Names of the Deities, as this did that of *Isis*. In like manner we find *C. Sentius Severus* of the *Triremis* call'd *Fides*. In a certain Inscription also in our *Diarium Italicum*, p. 385. there is mention made of the *Triremis*, call'd the *Hope*. Some *Triremes* we likewise find call'd by the Names of *Esculapius*, *Hercules*, *Minerva* and *Fortune*; and others again by those of *Neptune*, *Mercury*, *Triumph*, *Augustus*, *Capricorn* and *Danae*.

IV. The *Liburnæ* also occur in Inscriptions; for so in our *Diarium Italicum*, an Inscription makes mention of a *Liburna* call'd *Fides*. *Fabreti* likewise takes notice of one, where mention is made of *Liburna Diana*, *Liburna Neptunio*, and *Liburna Clupeo*: Which same Inscription speaks of a *Biremis* call'd *Mars Bicrōta*. And we have already seen that the *Dicrōtum*, which is the very same thing with the *Bicrōta*, signifies a *Biremis* or Vessel with two Ranges of Oars.

V. A Dispute happen'd between *Bellori*, who had publish'd some short Notes upon the last Edition of *Trajan's Pillar*, and *Fabreti*, who often refutes *Bellori's* Notes,

Notes, in his Book of *Trajan's Pillar*, printed at *Rome* in the Year 1683, which is a Work full of curious Discoveries: For *Bellori*, speaking of the God *Portunus* represented upon the Prow of a Ship, said that those Sea-Gods were formerly represented there, that they might be favourable to such as travell'd by Sea, and that those Ships bore the Names of these Deities, and this he founded upon the Credit of one of *Lucian's* Dialogues call'd *Navigium*, where it's said, that on the opposite side was the Prow, which extended it self a good way forward, and carried on its two sides the Image of *Isis*, who gave her Name to the Vessel.

To this *Fabreti* answers, that he does not deny that these Images represented upon the Prow of Ships gave their Name to the Ships; on the contrary, he owns it may be prov'd from some Passages of ancient Authors, as from *Strabo* in particular, who says that the Fishermen of *Cadiz* made use of Boats call'd *Horses*, from their having the Image of a Horse upon the Prow; and from *Virgil* also, who has these Words:

Hunc vehit immanis Triton.

Upon which Passage his Commentator *Servius* says that this *Triton* was painted upon the Prow. He therefore agrees with *Bellori*, that the Sea-Deities or others, when they were painted upon the Prow, gave their Names to the Vessels; but then he contends that the ~~Tutelar Deities of these Ships, and which were on~~ that account call'd *Tutela*, were painted and carved upon the Poop. *Seneca* also, according to *Fabreti*, gives the Name of *Tutela* to all that Part of the Poop, where these Tutelar Deities were put: The *Tutela* of the Ship, says he, was all of Ivory. But here perhaps he meant nothing but the Image alone, nay it's very probable he meant nothing else, seeing that this Image alone was call'd *Tutela*.

This Distinction of Images which gave Names to the Ships, from those that were look'd upon as Tutelar Gods, and were plac'd at the Poop, is prov'd by *Virgil*, who says that *Æneas's* Ship, which was a Vessel of the first Rate, had Lions upon the Prow, which he mentions as the Mark of the Vessel:

-----*Rostro Phrygios subveeta leones.*

But when he speaks of the *Tutela* or Tutelar Deity, he places it at the Poop, and says that she bore the golden Image of *Apollo*.

-----*aurato fulgebat Apolline puppis.*

Ovid says also, that the Poop of the Ship was adorn'd with Images of the Gods:

Accipit & pictos puppis adunca Deos.

Persius likewise says the same thing, and seems to suppose them to have been great Images:

Ingentes de puppe Dii.

Silius Italicus in like manner says that *Dione* the Goddess of the Ship, was at the Poop:

Numen erat celsæ puppis vicina Dione.

But *Ovid* in another place speaks yet more plainly, when he says that *Minerva* is the *Tutela* of the Vessel, and that a painted Helmet gives it its Name.

*Est mihi, sitque precor, flavæ tutela Minervæ,
Navis & a picta casside nomen habet.*

This Ship was therefore call'd *Cassis*, a Helmet, as a certain *Liburna* we have seen before, was call'd *Clupeus*, a Shield. According to this also, the Ship we shall see below in a Naval Combat, with a large Centaur upon the Prow, was probably call'd the *Centaur*.

CHAP. V.

I. *What the Epotides of Vessels were.* II. *A Passage of Pliny concerning the Inventors of Vessels with several Ranges of Oars.* III. *Pliny disagrees with other Authors.* IV. *After Augustus's time they very seldom used any Vessels with above three Ranges of Oars.*

I. **B**ESIDES the *Rostrum* or Beak at the Prow of Ships, they plac'd also in their Ships of War what the *Greeks* call'd *Epotides*; by means of which, *Suidas* says, they converted Vessels of Burden into Ships of War. 'Tis thought the *Corinthians* were the first that invented these *Epotides*, and that the *Syracusians* afterwards follow'd their Example in the War with the *Athenians*: But let us hear *Thucydides* upon this Matter. 'The *Syracusians*, says he, made ready their Fleet, and endeavour'd to remedy those Faults of the Ships they had taken notice of in the former Engagement, hoping to fight the next time with more Advantage: To this end they shorten'd the Prows of their Ships, and made them stronger; and added to the Prows thick *Epotides*, securing them both within and without with Girders, which for greater Firmness extended themselves along the sides of the Ship about six Cubits; and all that, in the same manner as the *Corinthians* had done, when they went to attack the Vessels that were at *Naupactum*.' By these Words of *Thucydides* it appears that the *Epotides* were a sort of Beams or Rafter, which extended from both sides the Prow, to guard against the Stroaks of the *Rostra*. The Etymologicon is therefore mistaken in saying that the *Epotides* were upon the Poop. We find no Word among the *Latins* that answers to these *Epotides* of the *Greeks*, nor do I know whether ever they had any such Word, unless we take those Beams that terminated in the Head of a Ram for *Epotides*, which may be observ'd in the Naval Combat below.

II. 'The *Quadriremis* or Vessel with four Ranges of Oars, *Pliny* says, was invented by *Aristotle*; the *Quinqueremis* or Vessel of five Ranges, by *Nesichton* a *Salaminian*; the Vessel of six Ranges, by *Xenagoras* a *Syracusian*, and those from six to ten, by *Mnesigeton*. *Alexander* the Great is said to have built some with twelve Ranges: And *Philostephanus* relates that *Ptolemy Soter* caus'd some to be built with fifteen; *Demetrius* the Son of *Antigonus*, with thirty; *Ptolemy Philadelphus* with forty, and *Ptolemy Philopator*, who was surnamed *Tryphon*, with fifty. The *Navis oneraria*, or Vessel of Burden, was invented by *Hippus* the *Tyrian*; the *Lembus* by the *Cyrenians*; the *Cymba* by the *Phoenicians*; the *Celox* by the *Rhodians*; the *Cercuron* by the *Cyprians*; the Observation of the Stars in Navigation, by the *Phoenicians*; the Oar by the *Copæ*; the broad Oar by the *Platæans*; the Sail by *Icarus*; the Mast and Yard by *Dedalus*; the Vessels for Transportation of Horses by the *Samians*, or by *Pericles* the *Athenian*, and the long Ships with Decks by the *Thasians*, before which time they fought only at the Prow and the Poop. To the Prows *Pisens* added *Rostra*; the *Tyrrhenians* found out the Anchor; *Eupalarnus* the Anchor with two Points;

Ana-

‘*Anacharsis* the Grappling Irons; *Pericles* the *Athenian* the Iron Hands, and
‘*Typhis* the Stays for the Helm.

III. What *Pliny* has said in the last Section, is not all to be taken for certain, it being repugnant to what is related by other Authors. Thus *Diodorus Siculus* gives another Account of the *Triremes* and *Quinqueremes*: ‘*Dionysius* the Tyrant, says he, understanding that the *Triremes* were first made at *Corinth*, caus’d larger Vessels to be built in a City that was once a Colony of *Corinthians*, namely *Syracuse*: For he built both *Triremes* and *Quinqueremes*, and other Vessels, and was the first that invented them.’ But the same Author expresses himself yet more clearly in another place, where he says, ‘that he built both *Triremes* and *Quinqueremes*, which last sort of Vessels no one had ever seen before.’ There are also many other things in the above-cited Passage of *Pliny*, contradicted by other Authors: But such fabulous Origins of things do not deserve a Refutation.

IV. The Vessels from six to twelve, and from thence to sixteen Ranges of Oars, were anciently look’d upon, those of *Demetrius* excepted, as Vessels unfit for Use, and rather of Disservice than Service. *Vegetius* also in a Passage of his above-cited, reckons no other Vessels fit for Ships of War; but the *Quinqueremes* and those of less number of Ranges of Oars: And it appears likewise that since *Augustus’s* time, scarce any other Vessels have been us’d for that purpose, besides *Triremes* and *Biremes* or *Bicrota*. In the Inscriptions of the Fleets that belong’d to the *Ravennates* and *Misenates*, which I my self have seen, and where mention is made of Vessels of *Triremes* and *Biremes*, there’s not the least notice taken of Vessels of four or five Ranges of Oars, which inclines one to think that Vessels of this sort were at least very rare in those Days. We have nothing to say in particular of the *Quadrirèmes* and *Quinqueremes*, more than what has been already said in general of Vessels of many Ranges of Oars.

Tho’ those huge bulky Vessels of *Ptolemy*, and *Hiero* King of *Sicily*, were of little or no Use, as has been above observ’d, but made only for Shew and Ostentation, yet forasmuch as there was something extraordinary both in their Structure and Magnificence, it will not be amiss to give the Reader the Descriptions left us of them by *Callixenus* and *Moschion*, related by *Athenæus*; seeing that these uncommon Productions of human Invention, tho’ of little Use, have yet something in them that’s pleasant and engaging.

C H A P. VI.

The great Ship of Ptolemy Philopator with forty Ranges of Oars.

P*tolemy Philadelphus*, *Athenæus* says, surpass’d all other Kings in number of Ships. For he had two very large Vessels of thirty Ranges of Oars, one of twenty, four of fourteen, two of twelve, fourteen of eleven, thirty of nine, thirty seven of seven, five of six, seventeen of five, and twice the number of all those together of Vessels of four and three Ranges. The Ships he sent to *Lycia* and the other maritime Towns under his Dominion were above four thousand in number.

But what *Callixenus*, cited by *Athenæus*, relates of the two Vessels built by *Ptolemy Philopator*, is far more surprising. That Prince, says he, caus’d a Ship to be

built of forty Ranges of Oars, the Length of which Vessel was two hundred and eighty Cubits, or four hundred and twenty Foot, and the Breadth eight and thirty Cubits, or fifty seven Foot. The *Acrostolion* at the Prow was eight and forty Cubits high from the Sea, or seventy two Foot, and that at the Poop fifty three Cubits, or seventy nine Foot and a half. This Vessel had four Rudders, each of which was thirty Cubits, or five and forty Foot. The Oars of the *Thranitæ*, or those of the uppermost Range, were eight and thirty Cubits, or fifty seven Foot long, which Oars, notwithstanding their great Length, were very easily manag'd by the help of a proper Quantity of Lead in the Handles to poise them with. The Vessel had also two Prows and two Poops, and in the Prows seven Beaks or *Rostra*, one of which protended farther out than the rest. It had likewise twelve Decks, the Circumference of every one of which was six hundred Cubits, all elegantly contriv'd. The whole Vessel, in short, was richly adorn'd, and had Figures of Animals at the Prow and Poop full twelve Cubits long. It was all adorn'd with Paintings besides, as were also the very Oars, and that part of them that was within the Ship, with Carvings of Vine and Ivy-leaves.

All the Arms of the Ship had also their Ornaments, and when the whole was finish'd, and they were to try how she would go, there were above four thousand Men to row her, and four hundred Seamen more, and two thousand eight hundred and fifty Soldiers, without reckoning a great number of other Men, who had the Care of the Provision. This prodigious Vessel was forc'd to be launch'd by the Help of an Engine, which had as much Wood in it as would have built fifty Vessels of five Ranges of Oars. The Launching too was attended with great Ceremony, the Trumpets sounding, and the People making great Acclamations.

C H A P. VII.

The Thalamegus, a great Ship built by Ptolemy Philopator for sailing on the Nile.

CALLIXENUS, after having describ'd by what kind of Artifice this monstrous Vessel was got into the Sea, proceeds to give an Account of another great Vessel built by *Ptolemy Philopator* to sail up the River in, which he calls *Thalamegus*, from its being provided with Chambers and Beds. The Length of this Vessel, he says, was half a *Stadium*, or a hundred and twenty five Geometrical Paces, which is three hundred and twelve Foot and a half: Its Breadth, where it was broadest, was thirty Cubits, or five and forty Foot, and its Height, taking into the Account the Tent built upon the Deck, forty Cubits or sixty Foot. Its Figure was neither the same with those they call'd long Vessels, nor yet of those they call'd round, but of a middle sort between those two, which Form they reckon'd most commodious for the River. The Hold of the Ship was very large, and the two Extremities of the Vessel very high, especially the Prow: It also widen'd and enlarg'd it self very much, tho' it seem'd to the Eye to be rectelineal. It had a double Prow and a double Poop, one above another, which were so contriv'd, because the Waves of the River were sometimes rough and boisterous. In the middle of the Vessel were contriv'd Dining-Rooms, and Bed-Chambers, and other Conveniences. On three sides of the Ship there was a double Gallery built, the whole Circuit of which was five *Jugera*; for so *Callixenus* expresses himself, who probably by the whole Circuit comprehends all the Inside too, for I think he cannot understand the Length only by *Jugera*: These two Galleries were one above

above another, the lowest sustain'd by Pillars like a *Peristyle*, and the highest cover'd and full of Windows on all sides. The Entrance into the first Gallery was at the Poop, from whence it extended it self to the right and left, and went quite round the Vessel. At the Prow this Gallery had a Porch adorn'd with Ivory and other things of Value: From this Porch there was a way to a cover'd Antichamber, which on the right and left had Windows to let in Air. Contiguous to this was the grand Apartment or Hall, adorn'd all round with Columns, and big enough for twenty Beds for the Table, and lin'd with Cedar and *Milesian* Cypress. The Doors all round, to the number of twenty, were also cover'd with a sort of precious Wood, adorn'd with Ivory, and with brass Nails and Rings, which, with Fire, were made the Colour of Gold. The Columns were of Cypress Wood, and the Chapiters of the *Corinthian* Order, and made of Gold and Ivory: The Architrave was all Gold, and the Frise very beautiful and rich, and adorn'd with Animals of Ivory above a Cubit long: The Work indeed was not very elegant, but the number of Figures was surprising. The Cieling of this Hall was four-square, all of Cypress Wood, and adorn'd with gilded Sculptures. Adjoining to this great Hall or Dining-Room, was a Bed-Chamber with seven Beds in it, divided from the Women's Apartment by a narrow Gallery or Passage. In this Apartment was a Dining-Room with nine Beds, which for Magnificence and Cost was not inferiour to the great Hall. There was also a Bed-Chamber with five Beds.

All that we have been hitherto describing was only the first Story; from whence, at the Bed-Chamber we have been speaking of, there were Stairs that led up to the second Story. Here one entred immediately into a Dining-Room with five Tables, the Cieling of which was in the Form of a *Rhombus*. Next to this Room was a Temple of *Venus* arch'd, in which was a Marble Statue of that Goddess. Over-against this Temple was another magnificent Dining-Room adorn'd all round with Columns made of *Indian* Stone. Near to this again were other Bed-Chambers, whose Ornaments were much the same with those before. In the way towards the Prow there was a *Bacchick* Apartment with thirteen Tables adorn'd all round with Columns: The Chapiters were gilded as far as the Architrave, and the Cieling made in a particular manner suitable to that God. On the right side of this Hall there was a Cave built adorn'd with Figures of *Mosaick* Work, or Stone made of different Colours, intermixt with Gold. In this there were Images of the Kings and Princes of *Ptolemy's* Race, made of a certain Stone call'd *Lychnitis*. There was also another very pleasant Dining-Room situated over the grand Apartment, held together by Cords after the manner of a large Tent, and making a kind of Arch. When they sail'd in this Vessel against the Stream, they put up purple Tents. Not far from this Dining-Room there was a large open Place, for the Convenience of taking the Air. In the same Place was a winding Stair-Case, by which they went up to a cover'd Gallery, and to a Dining-Room with nine Tables, dispos'd after the *Egyptian* manner. The Columns were round and fluted, and the Flutings one white and another black. The Chapiters were also round, adorn'd all about with Figures in form of Roses beginning to blow. At the Place which the *Greeks* call *Calathus*, where Volutes and large Leaves us'd to be plac'd, there were carved Flowers of the *Lotus*, or Fruits of Palm-trees, just budding, and in other Places other Flowers of a different kind. At the place where the Chapter is join'd to the Column, there were also Leaves and Flowers intermix'd, which is the way the *Egyptians* make their Columns. They also build their Walls with white and black Stones, dispos'd alternately, and instead of white Stones, they sometimes put Alabaster. There were also in this Vessel several other Apartments, both in the middle, and at the sides. The Mast of this Ship was seventy Cubits high, or a

hundred and five Foot. All the Riches of *Ptolemy Philadelphus*, which had been preserv'd by the Kings his Successors, were spent and wasted by *Ptolemy Auletes*, who made War with *Gabinus*: This *Auletes* was rather a Piper and Magician than a Prince.

C H A P. VIII.

A great Ship built by Hiero King of Syracuse, under the Direction of Archimedes.

THE same *Athenæus* proceeds to give an Account of a Ship built by *Archias* at the Command of *Hiero* King of *Syracuse*, and by the Direction of *Archimedes*, whom he calls the Geometrician; which Account he had from *Moschion* in Words like these.

Diocles of *Abdera* is admir'd by all the World for the Machine or Engine he made for *Demetrius*, with which that King assaulted the Walls of *Rhodes*. *Timæus* is also admir'd for the Funeral Pile he built for *Dionysius* the Tyrant of *Sicily*. Nor was *Hieronimus* less admir'd for the sumptuous Chariot he made to transport the Body of *Alexander* in; or *Polycletus* for the Lamp which he made. But *Hiero* King of *Syracuse*, and a Friend to the *Romans*, gained Esteem and Honour for many things: For being always ambitious and thirsting after Fame, he caus'd a great many large Ships to be built, especially such as they us'd for the Transportation of Corn; the Form and Structure of one of which I am now about to describe. There was as much Timber brought from Mount *Ætna*, as was sufficient for the building of sixty *Triremes* or Vessels of three Ranges of Oars. When this was done, the Pins, and Planks for the Decks and Ribs, and all other necessary Wood, were brought partly from *Italy*, and partly from *Sicily*. From *Spain* he had the Bark of the Poplar-tree, and from the *Rhone* Hemp for Cordage, and other Necessaries from other Places. He had Smiths and Carpenters and other Artificers in great number, and he appointed *Archias* the *Corinthian* to be the Master-Builder, exhorting him to put his Hand to the Work, and to make all possible Dispatch. He also spent whole Days himself among the Work-men, to encourage and animate them by his Presence.

Half of the Ship was built in six Months, which, as they finish'd, they cover'd with Plates of Lead. The Workers in Wood were three hundred in number, without reckoning a great many other Artificers. *Hiero* order'd this half of the Vessel thus finish'd to be launch'd, and the rest to be built as she lay in the Water. But forasmuch as she was already of an enormous Size and Bulk, and not easily remov'd, *Archimedes*, that great Engineer, found out a way to launch her with a few Hands: To this end he invented a certain Machine call'd a *Helix*, with the Help of which he got her into the Sea in a very little time. This done, the other half of the Vessel was finish'd in six Months more. She was all over fortified with large brass Nails, many of which were ten Poundweight, and some a great deal more. They first bor'd the Holes for them with *Terebræ* or Augurs, and then for fear the Nails should be too loose, they fasten'd them with Lead, putting also about them wax'd Cloth.

When all the Outside was finish'd, *Hiero* set them to work within. The Ship had in all twenty Ranges of Oars, and three Galleries within, the lowest of which was the way to the Hold, whither they went down by Ladders: Another led to the Apartments, and the last to the Soldiers Lodgings. In the middle Gallery there

there were Apartments at right and left to the number of thirty, in each of which were four Beds for Men. The Sailors Apartment had fifteen Beds and three Dining-Rooms, the last of which, whose Situation was at the Poop, serv'd for a Kitchin or Cook-Room. The Pavement of all these Apartments was made of small Stones of different Colours, in which the whole *Iliad* of *Homer* was represented. The Cielings, Windows and Doors, and every thing else were so well contriv'd, and so shone with Ornaments, that they struck every Body with Admiration. In the upper Gallery there was a *Gymnasium*, and besides that were certain Walks proportion'd to the Size of the Vessel: There were Gardens also and Plants of every kind, the Arrangement and Disposition of which was wonderful, and all these water'd by the help of Pipes, some made of Earth, and some of Lead. Nor did there want Arbours for Shades to the Walks, and to make them the more agreeable, and these made of white Ivy and Vines, whose Roots were planted in Tubs of Earth, and water'd as the rest of the Garden was. Next to these was *Venus's* Apartment with three Beds, the Pavement of which was of Agate and other precious Stones, the richest and most valuable in *Sicily*. The Sides and Roof were of Cypress Wood; and the Windows adorn'd with Ivory, Paintings and Statues, as also with a great number of Vases of different Species. After this one came to an Apartment call'd *Scholastericon*, in which were five Beds and a Library: The Walls and Windows of this Room were made of Box, and the Cieling represented the Pole, in the same manner as in the *Achradina*, which was one of the Quarters of the City of *Syracuse*. There was also an Apartment for bathing in, provided with three Beds, and in this three large Caldrons of Brass, and a Bason or Bathing-Tub made of a single *Tauromenites* Stone of different Colours, which was big enough to contain five large Measures of a hundred Pound each. There were also Apartments for the Sailors and those that look'd after the Pumps, and besides all this ten Stables plac'd on both sides the Vessel, together with Straw and Corn for the Horses, and Conveniences for the Baggage of the Horsemen and their Servants.

At the Prow was a large Conservatory of Water which they kept cover'd, and which would hold two thousand Measures: The Materials it was made of were Planks and Linnen cover'd with Pitch. Near to this Conservatory was contriv'd a Fish-pool, made of Planks and Sheets of Lead: This was always full of Salt-water for the Fish to feed in. There were also upon the Borders on each side certain Pieces of Timber jutting out at convenient Distances, upon which were Piles of Wood, Ovens, Mills, and many other Contrivances for the Service of Life. All round the Ship on the outside were Figures of *Atlas* six Cubits high, plac'd at equal Distances, and sustaining the upper Building and *Triglyphs*. The whole Ship was also adorn'd all round with Paintings: It was likewise provided with eight Towers proportion'd to the Size of the Ship, two at the Prow, two at the Poop, and the same number at each side: Upon these Towers were Parapets or Battlements, from whence they could throw Stones at the Enemies Ships, if they were approach'd too near. Every one of these Towers was guarded by four young Men in compleat Armour, and two Archers; and the whole Inside of them full of Stones and Arrows. Upon the Border or Wall of the Vessel was a kind of Rampart, upon which was an Engine for throwing of Stones, made by *Archimedes*, which would throw a Stone of three hundred Pound weight, and an Arrow of twelve Cubits long, the distance of a *Stadium*, which is a hundred and twenty Paces. There were also other Machines of Defence made of Wood, and suspended in Chains of Brass. The Ship had three Masts, at each of which were two Machines loaded with Stones; there were also grappling Irons, and Balls of Lead to throw at the Enemy, when they came within their Reach. The whole
Vessel

Vessel was environ'd with an Iron Rampart, to hinder the Enemy from boarding her if they should attempt it: There were also Iron Crows dispos'd all round, which they could throw at the Enemy's Ship by the Help of certain Machines, and grapple them, until they had got the better of them. Upon each Border of the Ship there were six hundred young Men arm'd *Cap-a-pe*, and as many about the Masts and Engines for throwing of Stones: There were also Soldiers in the Scuttles of the Masts, which Scuttles were of Brass, and they were thus dispos'd, three in the first Scuttle, two in the second, and one in the third: These were furnish'd with Stones and Arrows by little Boys that were below, who sent them up in Baskets by the help of Pullies. The Anchors of the Ship were twelve in number, four of which were of Wood, and eight of Iron. As for the Masts, they easily found Trees for the second and third, but could not so easily meet with one that was fit for the first: A Swine-herd however found one, as it happen'd, in the Mountains of *Bruttia*, which *Phileas* the *Tauromenitian*, and an Engineer, brought away. Tho' the Sink of the Vessel was exceeding deep, yet one Man emptied it by the Help of a certain winding Machine, invented by *Archimedes*. This Ship was at first call'd the *Syracusan*; but afterwards the *Alexandrian*, when *Hiero* sent her to *Ptolemy*. A great many smaller Vessels of Burden accompanied her, the Chief of which was a *Cercurus*, able to carry three thousand Talents, at sixty *Minae* to the Talent, and a hundred Drachms to the *Mina*, tho' she had no Sails, but was row'd altogether. Besides this *Cercurus* there were several other Vessels and Fisher-boats big enough to carry five hundred Talents. In these there were as many Men as in the other above-mentioned; for at the Prows there were not less than six hundred, all ready at the Word of Command. If any Quarrel or Contention happen'd to arise among them, the Matter was carried to the Master, or Pilot or Boatswain, and they determin'd it according to the Laws of *Syracuse*. There was on Board these Vessels sixty thousand *Modii* of Corn, ten thousand large earthen Vessels after the *Sicilian* Fashion, full of Salt-fish, twenty thousand Talents of salted Flesh, and the same Weight of Baggage, without reckoning the Provision for the Passengers. After all this, *Hiero* understanding that there was no Port in *Sicily* big enough for this monstrous Vessel, except some few where she could not ride safe, resolv'd to make a Present of her to *Ptolemy* King of *Egypt*, and to send her to him to *Alexandria*; which accordingly he did, and had her tow'd along all the way. Upon the building of this magnificent Vessel by *Hiero*, he receiv'd an Epigram in Honour of it from *Archimelus* an *Athenian* Poet, in Recompence of which he sent him a thousand *Medimni* of Corn, and deliver'd it at his own Expende at the Port *Piræum* at *Athens*. The *Medimnus* was a Measure of six *Sextarii*, so that the whole Present was six thousand *Sextarii*.



B O O K IV.

Ships of War ; their Rigging and Ornaments : Naval Battles,
and Sea-Ports.

C H A P. I.

- I. *The Rostrum of the Prow, one of the principal offensive Arms of the Ship.*
 II. *Ramparts raised on the sides of the Ships.* III. *The Rowers covered during the Fight.*

I. **O**F the *Rostrum* or Beak of Ships, enough has been said, and the Form or Figure of it sufficiently explain'd. It may not be amiss however to repeat in this place, that this was one of the principal Arms of a Vessel, and what they run upon the Enemy's Ships with, in order to make a Breach therein, and sink them; to which end it was built very low, not much above the Surface of the Water, nay for the most part below it; for which Reason *Virgil*, in the 5th *Æneid*, says that the Ships plough'd the Sea with their *Rostra*, and made it roar with those and their Oars:

-----totumque dehiscit
Convulsum remis rostrisque stridentibus æquor.

Lucan also expresses himself in the same manner:

-----nam murmure vasto
Impulsum rostris sonuit mare.

Scheffer tells us that it was plac'd thus low, that it might wound a Ship so as to let in Water enough to sink her. And thus it was, according to *Polybius*, 'that *Attalus*, in a Vessel of eight Ranges of Oars, bore upon an Enemy's Ship, and pierc'd her so under the Surface of the Water, that she sunk immediately to the bottom.' But then the same Author adds in the following Chapter, 'that when two Ships encounter'd, they always endeavour'd to turn the Prow upon each other, that if they should happen to be wounded, it might be above the Water, because the Damage would be without Remedy, were the Wound or Breach under its Surface.' What he means by this, I confess I understand not: For if the *Rostrum* of the Ship that gave the Wound was either under Water, or little above the Surface, the Wound must needs be receiv'd at the very same height. It seems therefore more probable that they endeavour'd to present the Prow, that the Enemy bearing upon them might wound himself at the same time with the other's *Rostrum*. But be that as it will, we have given the Passage as it is in *Polybius*.

In the Sea-Fight exhibited in this Plate, most of the *Rostra* of the Prows are above the Water, and several Ships have two Prows of the same Form, the one above the other, but at some Distance. We are told by *Diodorus Siculus*, that it was *Aristo* the Corinthian who perswaded the *Syracusians*, whose City was then besieged by the *Athenians*, to make their Prows lower and shorter; and that they

accordingly took his Advice, and found by Experience that the Victory they obtain'd was in a great measure owing to it: For the Prows of the *Athenians* were high and weak, so that the Damage their *Rostra* did the Enemy was all above Water, and by consequence not dangerous; whereas the *Syracusan* Prows were very low and strong, and with one Stroke often sunk an *Athenian* Vessel of three Ranges of Oars.

II. All round on the Sides of the Ships they rais'd Ramparts for a Cover for the Soldiers, at least to cover'd them to a certain Height, that their whole Bodies might not be expos'd to the Enemy. *You shall walk* (says *Horace*) *among the high Ramparts of the Ships.*

*Ibis Liburnis inter alta navium,
Amice propugnacula.*

Whose Scholiast upon that Passage says that these Ramparts were like Walls, for the Soldiers to defend themselves behind, and shoot their Arrows at the Enemy.

III. It appears that the Rowers were under Cover, and safe from the Enemy's Arrows, at least during the time of Engagement, and that they made Decks for the Occasion to such Vessels as had none, that they might work at the Oar with Safety, and not be expos'd to the Darts of the Enemy. The *Marseillans*, *Cæsar* says in the second Book of his Civil War, added Fisher-boats to their Fleet, and furnish'd them with Decks to cover the Rowers from the Darts of the Enemy: And in the third Book adds, that he arm'd for War sixty Skiffs of large Vessels, cover'd them with Decks, and fill'd them with pickt Men. In the following Sea-Fight all the Vessels are close-deck'd, and their Sides fortified like a strong Town, some of them having Battlements at certain Distances like Towers and Forts. It does not however appear that all Vessels in Sea-Fights were close-deck'd: On the contrary, *Cæsar's* manner of expressing himself seems to suppose that they were not always so.

C H A P. II.

I. Towers raised on the Ships: a Passage of Vegetius. II. In what Part of the Ship the Towers were placed. III. These Towers erected only during a Fight, according to Servius.

I. **A**NOTHER sort of Fortification us'd in their Ships was Towers; of which *Vegetius* makes mention in his Description of a Sea-Fight: Which Description, forasmuch as it furnishes us with some Instruction, we shall here afford a place. 'In Land Engagements there is Occasion for different sorts of Arms; 'but a Sea-Fight requires not only more of these, but Machines of every kind too, 'as if there were Walls and Towers to be attack'd: For what can be more cruel 'than a Sea Engagement, where Men perish both by Fire and Water? Particu- 'lar Care therefore ought to be taken that the Soldiers be under Cover, and that 'they be compleatly arm'd with Helmets, Coats of Mail, and other Pieces of 'Armour; because they who fight on Ship-board, and have no Marches to 'fatigue them, ought not to complain of too much Weight. Their Shields must 'be also larger and stronger, that they may better resist the Blows of Stones, Siches 'and other Weapons us'd in Ships, such as Arrows, Darts, Slings, Levers, Balls 'of

of Lead, Engines call'd *Onagri*, *Ballistæ* and *Scorpions*. But what's yet more bloody is, when they come close in their *Liburnæ*, they throw Bridges upon the Enemy's Ship, board it, and attack one another Sword in Hand. In the *Liburnæ* of greatest Bulk they also raise Ramparts and Towers, that they may fight from thence as from the Walls of a City, and annoy the Enemy the more by the Advantage of a higher Situation. With the *Ballistæ* they throw into the Enemy's Ships burning Arrows, smear'd over with Oil, and wrapt up in Tow and Sulphur, which presently sets Fire to the Decks, because they are cover'd over with Pitch, Rosin and other Combustibles. Thus some perish by Fire, some are knock'd on the Head with Stones, and others are burnt in the very Sea. But besides all this, what is still worse, their Bodies want Burial, and become a Prey to the Fish of the Sea.

II. And thus have we a lively Image of a Sea-Fight. The Towers taken notice of by *Vegetius* were very much in Use among the *Romans*. *Pliny* also tells us, that they fought at Sea from Towers and Fortresses, as from the Walls of a City. *Pollux* likewise says, that one Ship had two Towers, the one on the right and the other on the left. *Appian* also speaks of two Towers, one at the Prow, and the other at the Poop. But we shall find in the Sequel, that these Towers were not only plac'd at the Prow and Poop, but also on the Sides, and in the very Center of the Ship.

III. These Towers however were only put up occasionally, that is, at the time of an Engagement, for had they been always there, they would have been too troublesome, and have hinder'd the Ship's Way. For this Reason therefore they had Planks and all other Materials ready at hand to put together as Occasion requir'd: Thus *Servius* to this purpose, says upon this Passage in *Virgil*,

Tanta mole viri turritis puppibus instant.

that they rais'd these Towers on a sudden with Planks, when they were about to engage the Enemy, and that they did this when the Enemy expected no such thing. The same *Servius* also adds, that these Towers thus rais'd in their Ships on a sudden, were the Invention of *Agrippa*. But that cannot be true, unless he means no more by it, than their doing it with so much Expedition: For they certainly had Towers in their Ships before that time, as appears from *Cæsar*, who in his third Book of the Civil War, says, 'that another Ship, design'd by *Acilius* for a Guard-ship, was attack'd by several Ships, in which *Cneius Pompeius* had built Towers, who fighting thus from an advantageous Height easily got the Victory'. *Livy* also makes mention of Towers built in Ships, but design'd, as he seems to suppose, for Sieges. 'They join'd, says that Author, two *Quinqueremes* together, and took away all the Oars from between them, that they might lay side to side: Which done, the two outside Ranges of Oars work'd both the Ships, which were provided with Towers and other Machines of War to beat down Walls with.' *Thucydides* also takes notice of a Ship which the *Athenians* had at the Siege of *Syracuse*, furnished with Towers and Ramparts.

In the Sea-Fight which we shall describe below, the Towers are very high, and plac'd upon the Deck and in the middle of the Vessel: They are furnish'd with Battlements, and some of them are several Stories high. The Men ought to be very dextrous, and pretty much us'd to the Work, that could raise such large Towers and Fortresses in so small a space of time; it being very probable they were put up only when they were about to engage, how great soever they were, because a Ship could not possibly make much way, which was so encumber'd. The Ships that compos'd *Mark Anthony's* Fleet had also these Towers to fight in.

CHAP. III.

I. *The Dolphin, an Engine of War used on Ship-board.* II. *What kind of Beds the Rowers and Ships Crew had.* III. *The Oars.* IV. *The Sails.*

I. **T**HE Ancients had, besides the Machines above mention'd, others which they call'd *Dolphins*, which Name they gave them from their being of the Figure of a Dolphin: This Engine was in Use among the *Greeks*, according to *Suidas* and the Scholiast upon *Aristophanes*, and was hung upon the Yard, and from thence thrown into the Enemy's Ship, which with its Weight and Bulk it pierc'd and sunk. It seems to have been very much in Use, and peculiar to the *Greeks* only.

II. What's here remarkable is, that the Rowers had no other Bed but the Benches they sat upon when they row'd, and the Soldiers the same. Of the Rowers however *Virgil* speaks very plainly.

----- *Placida laxarunt membra quiete*
Sub remis, fusi per dura sedilia nautæ.

The Commanders and other chief Officers had indeed Mattresses to lie on, but then these had nothing under them but Boards; and therefore it was that *Alcibiades* was accus'd of Softness and Effeminacy, for having a swinging Bed or Hammock, such as are commonly us'd a-board our modern Ships.

III. The Oars, call'd in *Latin*, *Remi*, and by the Poets *Tonsæ*, were fasten'd to a large Peg or Pin, drove into the Edge of the Vessel, and call'd in *Latin*, *Scalmus*. Some are of Opinion that they cover'd the Oars with Brass, to make them more strong and firm. But these things were not always uniform, but on the contrary underwent many Changes, that being quite laid aside at one time, which was in Use at another.

IV. Sails were call'd in *Latin*, *Vela* and *Tumices*, which last Word denotes their being fill'd with Wind, and in *Greek* ἵσα and ἀρμενα. In the early Ages each Ship had but one Sail, but in After-times they introduc'd the Use of more. 'At this Day, says *Pliny*, a Sail of the largest Size is thought insufficient alone; 'and though there goes a whole Tree to the making of a Mast, yet do they now 'begin to add to this, and put up other Sails above the first, as also at both the 'Prow and Poop, by so many ways do they seek Death.' The Top-sail, or that which was at the top of the Mast, they call *Supparum*. The Materials of the Sails were Line, Hemp, or Rush, and in early Ages Hides; for such, *Cæsar* tells us, were the Sails of the *Veneti*, a People of *Gaul*. 'Instead of Sails, says he, 'they make use of Beasts-skins, which they do either for want of Flax, or because they know not the Use of it, or else, which is indeed more probable, because they think such sort of Sails not strong enough to hold in tempestuous 'Weather, and withstand the Violence of stormy Winds.' According to *Strabo*, they that inhabited near the *Nile*, made their Sails of certain Canes or Reeds, which they work'd into a sort of Mat. The Colour of their Sails was of old white, but in process of time they painted them of different Colours: Some also were dy'd a purple Colour, and some Hyacinth.

At the top of the Mast was the *Carchesium* or Skuttle, as we call it at this Day: This appears to have been hollow like a Bowl or Cup, for which Reason I suppose it is, that a certain kind of Cup is call'd *Carchesium*, tho' it is not certainly known whether of the two gave Name to the other. The Cords and Cable;

Cables of the Ship were made of Line, Hemp, Rush, Palm-leaves, the Plant call'd *Papyrus* and *Philyra*, the Leaves of which, as has been before observ'd, had long Threads or Filaments very proper for that purpose: They also made Cords of the Bark of Trees, as of Cherry-tree, for Instance, Linden-tree, Vine-tree and others.

C H A P. IV.

I. The Rudder. II. The Anchors. III. The Plummet. IV. The Pictures on the Ships.

I. **T**HE Helm or Rudder of the Ship was nothing but an Oar of a larger Size than the rest, as may be seen in most of the Vessels exhibited above, and in the succeeding ones too. The Name of this in *Greek* was *πιδάλιον*, and in *Latin*, *Clavus* or *Gubernaculum*. There were oftentimes several of these Helms in the same Vessel.

II. Their Anchors, the Invention of which some attribute to *Midas*, and others to the *Tuscan*s, were anciently of Stone or Marble: For so much we learn from *Arrian*, who, speaking of the Temple of *Diana* at *Colchos*, thus expresses himself: 'They there shew, says he, the Anchor of the Ship *Argo*, which to me does not appear to be antique, as being made of Iron; and tho' with regard to its Size and Form it differs from our modern Anchors, yet I cannot but think it of a much later Age. There are however some Fragments of an antique Stone Anchor, which seem to be indeed the Remains of that Anchor of the *Argonauts*.' 'Tis said they formerly made them of Stone in the Kingdom of *Calecut*, and that they also do the same at this Day in *Japan*. In *Hiero's* great Ship, whose Description we have given above, there were four Wooden, and eight Iron Anchors; so that *Scheffer* (whose excellent Book *de militia navali* has been of great Service to us) was mistaken, when he said that these twelve Anchors were in *Ptolemy Philopator's* Ship; seeing they were most certainly in *Hiero's*, as we are told by *Moschion* in *Athenæus*. The same *Scheffer* is of Opinion that there were some Anchors without Points, so that instead of fastening them in the Earth, they had Weights of Lead to stay them: To support which, he produces the Testimony of *Diodorus Siculus*, who says that the *Phenicians* sailing to *Sicily* to traffick there for Silver, found so great a Quantity, that they not only fill'd their Vessels with it, but took the Lead from off their Anchors, and put Masses of Silver in its place; for which reason it is that *Donatus* calls these Masses *pondera Anchorarum*, the Weights of the Anchors. Sometimes also they us'd great Baskets full of Stones instead of Anchors, and Bags of Sand; but then this was only when they had no other, or else when the bottom was so sandy, that the pointed Anchors would not hold. Anchors were at first made with only one Point, but afterwards with two, which last are said by some to have been invented by *Empalamus*, and by others ascrib'd to *Anacharsis*.

III. The Plummet or *Bolis*, as it is call'd both in *Greek* and *Latin*, was an Instrument made use of to sound the Bottom of the Sea, as at this Day, to find the Depth; and discover the Quality of the Ground, whether it was stony, sandy, or muddy. The Instrument made use of to draw Water out of the Sink, was call'd *Antlia*. The Ancients had also the way of towing large Vessels, when they

either happen'd to be becalm'd, or were too heavy to make their way: And of this we have seen an Example above, where we treated of *Hiero's Ship*, which he made a Present of to *Ptolemy*, which being of so prodigious a Bulk, was forc'd to be tow'd to *Alexandria*.

IV. The Custom of painting Ships was so ancient, that we meet with it in *Homer*, who in his *Odyssey* says, that the *Cyclops* had none of those Vessels, which he calls *μυλτοπάρηοι*, whose Prows were painted with red:

Οὐ γὰρ Κυκλώπεσσι νέες πάρα μυλτοπάρηοι.

The same Author says elsewhere that they had also Prows painted blue or Sky-colour. *Herodotus* says that all Vessels were anciently painted red, which Colour they gave them, to resist both the Sun and the Sea. They also painted upon them the Images of Gods, Tritons, Sea-horses and other Animals: Nor did they content themselves with this, but they adorn'd them besides with Statues and Carvings especially at the Prow and Poop, as may be seen by several Examples given above. We shall also see below a large Statue of a Centaur upon a Prow, at which place they generally put the Mark of Distinction to know one Ship from another, and for every Man to know his own. It's probable the Centaur last mention'd gave its Name to the Vessel, and that these *Insignia* generally denominated the Ships. The Name of the Ship was also pretty often writ upon the Prow.

They us'd also to put upon the Poop a sort of Streamers to know which way the Wind blew. In the *Aplustre*, says *Pollux*, they fix'd a Staff upright, which they call *Stelida*, in the middle of which is a *Fascia* or Band of Stuff. *Eustathius* says that this Streamer was the Mark of the Ship; but it's more probable it was design'd for nothing but to shew how the Winds blew.

CHAP. V.

- I. Whether the Seamen and Rowers did their Business naked, or had Cloaths on.
- II. The military Habit and Arms of the Seamen.
- III. The battering Ram, and other warlike Engines of Ships.

I. **A**LL that we have hitherto said regards the Ships only: We come now therefore to speak of the Sailors and Soldiers. The Sailors, *Scheffer* says, generally did their Business naked, and were very seldom dressed, and for this he produces the Testimony of several Authors. Among the rest he cites *Victor* speaking of *Faustina*, the Wife of *Marcus Aurelius*, (whose Wantonness is describ'd by many Historians,) that she sat by the side of the Sea looking at the Seamen, who generally work'd naked, that she might chuse from amongst them such as she thought fittest to gratify her Lust. The same Author adds a Passage of *Virgil*, which says that the young Seamen had their Shoulders naked, and anointed with Oyl:

*Cætera populea velatur fronde Juventus
Nudatosque humeros oleo perfusa nitescit.*

But if ever they were cover'd, it was with Habits of Goats-hair, according to *Varro*, as what were best to keep out Wind and Wet. *Scheffer* however says that this is to be understood only of the Seamen, and not of the Rowers, for that they

they were almost always naked. And this obliges me to repeat again what has been said, namely that we ought to take Care not to make a standing Rule of what we meet with, tho' the same occur in several Authors, because they sometimes relate for general Customs things that were peculiar only to some particular Country, or else certain Usages of their time, which were afterwards laid aside for others, and also because they are sometimes mistaken. For this very Custom of Seamen and Rowers working naked, is so far from being general, that in all the Vessels we have yet seen, both the one and the other are always cloath'd.

II. The military Habit of the Seamen were, according to *Pollux*, the Coat of Mail, the Shield, the Helmet and the *Ocreæ*, which was pretty much the same with that of the Land-Soldiers. So *Vegetius* also: 'Let the Marines, says he, be arm'd with Cuirasses, Helmets and *Ocreæ*.' And in this manner we see them arm'd in the Naval Combat exhibited below. Their offensive Arms were also for the most part the same with those of the Land-Forces, as Swords, Bows and Arrows, Slings, Clubs and two-edg'd Axes. They had indeed some others that were peculiar to themselves; such were a sort of long Pikes to reach the Enemy at a Distance, and long Poles with a Bill or Sithe fasten'd at the end to cut the Enemy's Cordage with. These last *Cæsar* takes notice of, and says they were of very great Use to cut the Cordage with of the Enemy's Ships, because that brought down the Yards. The Name they gave them was *hasta falcata*, and the Greek Name, as appears in *Diodorus* among others, was *δορυδ περὶ πύργου*.

III. They had likewise a kind of Ram, which they call'd *Affer*, and which *Vegetius* describes in this manner: 'What they call the *Affer*, says he, is a long small Beam done with Iron at both Ends, which they hang upon the Mast like a Yard; and with which they beat off the Enemy both at right and left, when they attempt to board them, and not only bruise and kill the Men, but sometimes also beat Holes in the Ship.' They had also Engines for the throwing of Stones, and Iron Hands which they us'd to hook and grapple the Ships with, the same with what we call at this Day Grappling Irons, which we make use of to board the Enemy's Ships with. These Iron Hands however differ'd from another sort of Grappling Iron they had, which they call'd a Crow, and us'd for the very same Purpose.

Another way of annoying the Enemy's Ships was by throwing Fire therein, which they did after different Manners, some using for that end *Syphons* and Fire-Buckets, and others throwing in Pots fill'd with Fire.

CHAP. VI.

I. The military Ensigns and Signals of Vessels. II. The Trumpets and Shouts of the Seamen. III. How the Greeks and Romans exercised their Seamen, Rowers and Marines.

I. **B**ESIDES Arms of Offence and Defence, Vessels had also their military Ensigns and Standards, as we have seen in the Ship of the Emperor *Trajan*. The Greeks had likewise such like Ensigns, and those probably diversified according to the Diversity of Nations and Customs. Among the Romans the Li-ctors had their Station near the Prince or Præfect; and *Appian* says that the Chief of

of *Mark Anthony's* Lictors had his Station at the Prow, and order'd the Ensigns to be taken away. The *Greeks* used often the Shield for a Signal.

II. The Trumpet, and what they call'd the *Litus*, were what they us'd to make Signals a-board their Vessels; and so was also the *Celeusma*, which was a Shout or Noise made by the Mariners when they were doing any thing with united Force; which Cry, according to *Aristophanes*, was *Rhippapé* and *Oop*; but they had without doubt other Cries beside this. Instead of the Voice they sometimes also made use of Stones, according to *Xenophon*, and struck them against one another; but this Signal was probably on some particular Occasion only. The Rowers had also their Cries, to make them keep time with their Oars, and to pull either harder or softer, as there was Occasion; which Signal was also given by singing, and sometimes by Musical Instruments: For so *Asconius Pedianus* says, that to animate the Rowers they us'd Symphonies, and sometimes the Voice alone, and sometimes the Guitar.

III. The manner of exercising the Sailors and Rowers, as well as Marines, both by *Greeks* and *Romans*, but especially by the last, was very remarkable: Nor was it without long Practice that they arriv'd at the Art of doing such difficult Work with Ease and Order. *Xenophon* takes particular Notice of their Dexterity, and says that when they were seated in their Ranks they never embarrass'd one another, but manag'd their Oars with great Order, and kept Stroke with all the Exactness imaginable. *Thucydides* also relates with great Accuracy, and in a very particular manner, the Exercise us'd by the *Syracusians*, when they were to engage the *Athenians* at Sea, who at that time were thought to excel all the rest of the *Greeks* in Naval Affairs.

The *Romans* also took a great deal of Care to exercise their Seamen and Marines; the manner of which Exercise *Polybius* thus describes: 'So long as they that had the Care of fitting out a Fleet, says he, were employ'd in Ship-building, others were providing Sea-men and Rowers, and exercis'd them at Land in this manner, that they might be fit for the Service: The Rowers they seated upon the Sea-shore in the same Rank and Order, as they were dispos'd in when they were a-board, and plac'd an Officer in the middle of them to give the Word of Command, and instruct them to plunge and recover their Oars all together, and to leave off rowing in an Instant whenever the Word was given for that purpose. For the Commanders had their *Celeusmata*, which were the Signals when they were to begin to row, and when to leave off; and the Rowers had also their Cry in their Turn for the same purpose.' As to those that gave the Signal to the Rowers by singing, let's hear what *Plutarch* says in the Life of *Alcibiades*: 'Callipedes, says he, an Actor in the Play-house, and in his Tragick Dress and Buskins, and with all the Ornaments us'd by Actors upon the Stage, had the Command of the Rowers, and gave them their Signals in Song.



C H A P. VII.

I. The Omens of happy Success in their Expeditions; the Sacrifices. II. The Disposition for Battle. III. The Order of Battle.

I. **T**HESE Pagans, when they went a-board their Ships, had several Observations from which they took the Prefages of the good or bad Success of the Navigation or Expedition: Thus if a Man happen'd to sneeze in turning towards the left Hand, it was reckon'd a bad Omen, and on the contrary a good one if it was towards the right. It was also thought a bad Prefage if Swallows happen'd to light on board and stay there. As soon as they embark'd, their manner was to offer Sacrifices to *Neptune*, the Sea-Gods, and Winds, either to all, or such only as they wish'd to have, or else such as they desir'd might not blow. They also sacrific'd to *Apollo* and the Tempests, as has been already observ'd in the first and second Volume. They likewise offer'd Victims to a Calm; for they deified every thing, as also to *Castor* and *Pollux* and the other Stars.

II. When they prepar'd for an Engagement, the first thing they did, was to unlade the Vessels that were design'd for Combat, that they might tack about with more Dexterity, and perform all their other necessary Motions without Incumbrance. They always took Care to fight at some Distance from the Shore; and we shall see below that the *Romans* were beat by the *Carthaginians*, for not keeping far enough out at Sea. *Themistocles* however gave Battle to the *Persian* Fleet between two Shores, but then the State of his Affairs requir'd it. They also observed, as is customary at this Day, when the Winds blew contrary, and struck their Sails, managing the Ship with Oars only: Thus in the Sea-Fight exhibited below, all the Sails are struck, and the very Masts disappear, for a Reason we shall give in its proper place. On certain Occasions, however, they left some of the small Sails spread, and struck only their main Sails.

III. All this done, the Captain or Commander dispos'd the Fleet into Order of Battle; which was not always the same, but rang'd at the Discretion of him that had the Command, according to the Circumstances of Time, Place, and Condition of the Enemy. In the Time of the Republick, the *Romans*, according to *Polybius*, rang'd their Fleets into four Classes, or Squadrons; but that Custom was afterwards chang'd, and we see almost as many different Orders of Battle, as there are Actions. Nor were the *Greeks* more uniform in this Respect, but dispos'd their Fleets always into such Order as the State and Condition of things requir'd. If the Fleet was rang'd into the Form of a Half-moon, the Commander was in the Center; if in a right Line, his Station was at the right Wing; and if the right Wing of the Enemy happen'd to be strongest, he then commanded the left Wing, the better to oppose the Enemy's right. The Disposition of the Ships was either close or otherwise, according to the Disposition of the Enemy's Fleet. Another way of ranging a Fleet into Order of Battle, was into an Oval Form, which was very common among the *Greeks*.

The Soldiers on board had also all their several Stations assign'd them, some being placed upon the Deck, and others by way of Reserve below Deck, to supply the place of such as were kill'd above, or disabled. The heavy-arm'd were also at the sides of the Deck, and the light-arm'd, such as were the Archers and Slingers, at the Prow or Poop, and sometimes too at the middle of the Deck: But neither was this Disposition uniform and always the same, but regulated at the Discretion of the Commander.

C H A P. VIII.

I. Other Presages observed before the Battle. II. A Sea-fight. III. The manner of boarding Ships.

I. **T**HE Superstition of taking Presages before the Fleets engag'd, was one of the most prevailing that we meet with in Antiquity, both *Greek* and *Roman* History being full of it. Some of their Presages were generally held as certain Prognosticks of good or bad Luck, tho' others perhaps, and those too in much greater number, were only the Whim or Fancy of some particular Diviners. They also offer'd Sacrifices to the Gods, as has been already observ'd, as soon as they went on board. Before the Battle began, the Commander generally went on board some Skiff, or other light Vessel, and then went through the Fleet, encouraging them, as he saw Occasion, to behave manfully and courageously: Which done, the Trumpet sounded to Battle, first in the Admiral's Ship, and then in all the rest.

II. When the Signal to Battle was thus given on both sides, the Fleets approach'd each other, or else tack'd about in such a manner as to attack the Enemy in that part they thought most advantageous; sometimes endeavouring to disperse their Ships, and sometimes retreating from the Attack they had made, in order to make it again with more Vigour. They also endeavour'd to break one another's Oars, in order to disable them, which in *Latin* is call'd *ramos detergere*. They likewise run violently upon one another, in order to stove, split, or sink the Enemy's Ship; and this they did either upon the Prow, or Poop, or Broad-side of the Ship, in which last place the Attack was most dangerous, as being much weaker than either of the other; it happening sometimes that one single Stroke in that part sent her to the Bottom. The Strokes given at the Prow were dangerous nevertheless, because they oftentimes bore away the Men that had their Station there into the Sea, and in some measure disabled the Ship, and made her less fit for Service. To avoid therefore as much as they could, or at least break the Force of these Stroaks with the *Rostra*, they us'd to thrust out their Oars as far as they could, to receive the Shock. They sometimes also bore upon the Poop of the Enemy's Ship, and especially when she was endeavouring to make off.

III. But when they began to grapple one another with their Iron Hands, then the Fight was bloody, and each Party endeavour'd to board the other's Vessel: For which purpose they threw Bridges over from one Ship to the other; tho' sometimes the Soldiers were so daring, as to leap in without the Help of these Bridges.

And thus much for what was generally observ'd in Sea-Fights: To which we have here added, in order to give the Reader a clearer, and more instructive Idea of the thing, the History of some particular Engagements. Of these the first we shall present the Reader with, are the two Battles of the *Greeks*; namely that at *Salamis* with the *Persian* Fleet, and that of *Demetrius* with *Ptolemy*, which was also at *Salamis*, but yet not the same with the first. The next we shall describe shall be two Battles of the *Romans* with the *Carthaginians*, in the first of which the *Romans* were conquer'd by *Adherbal*, and in the second were victorious under the Conduct of *Luclatius*. After these we shall conclude with a Sea-Fight, copied from the Bass-Reliefs of the Duke of *Alcala*, which are in his Gardens at *Sevil*, with many other Bass-Reliefs transported thither from *Rome*.

C H A P. IX.

The Sea-fight at Salamis between the Persians and Greeks, where the Greeks conquered.

THE *Salaminian* Battle had its Name from the Island *Salamis*, the Place where 'twas fought. But here *Themistocles*, who commanded the *Athenian* Fleet, was forced to make use of a Stratagem to keep the rest of the *Greeks* together, and oblige them to give Battle: For the *Peloponnesians* were making ready to retreat and withdraw themselves from the rest of the Fleet, and abandon the *Athenians*, in order to go back and defend their own Country and Sea-Coasts; which Retreat and Division of the Fleet (had it happen'd) would have been the Ruin of *Greece*. *Themistocles* therefore, to prevent the Mischief that must have ensued, caus'd secret Notice to be given to the *Persians* (pretending at the same time to be in their Interest) that the *Grecian* Fleet was making ready to escape; and this he did that the *Persians* might come with their Fleet and stop up the Passage behind, which they accordingly did: By these Means he deceiv'd both the *Peloponnesians* and *Persians*; the first, by cutting off their Retreat; and the last, by drawing them to Battle, in a Place where the great Number of their Ships was of no Advantage to them: For it was in a Streight, where they could draw out no more Ships in Front than the Enemy, nor attack them in Flank; in a word, it was so narrow a Pass that they could not engage otherwise than on equal Terms; whereas the *Athenians* and other *Greeks* on the other hand, besides this Advantage gain'd of the Enemy, were both much better experienc'd in Naval Affairs, and much braver Men than they. The Fleet that *Xerxes* had, consisted of Twelve hundred and seven *Triremes*, or Vessels of three Ranges of Oars, of different Nations that were subject to that Prince: Of these, the Quota of the *Phœnicians* and *Syrians* was Three hundred; that of the *Egyptians*, Two hundred; that of the *Cyprians*, a Hundred and fifty; that of the *Cilicians*, a Hundred; that of the *Pamphylians*, Thirty; that of the *Carians*, Seventy; that of the *Lycians*, Fifty; that of the *Dorians* on the Coast of *Asia*, Thirty; that of the *Ionians*, a Hundred; that of the *Islanders*, Seventeen; that of the *Æolians*, Sixty; and that of the *Hellepontians*, a Hundred. Besides all these there was a great Number of other small Vessels of Thirty, and from thence to fifty Oars; of *Circuri*, *Hippagines* (or Transports) and others, in all Three thousand. The Commanders or Admirals of this great Fleet, were *Aribignes* the Son of *Darius*, *Prexaspes* the Son of *Aspathimus*, *Megabazus* the Son of *Megabatus*, and *Achemenes* another of *Darius's* Sons. The *Grecian* Fleet, on the contrary, did not consist of above Three hundred and seventy eight Ships, besides some small fifty-Oar Vessels; of which Three hundred and seventy eight, the *Athenians* alone furnish'd a Hundred and eighty for their Quota.

The Battle began as soon as it was Day, and *Aminias Pallenius* the *Athenian* was the first that made the Attack, which he did with so much Violence, that he ran his *Rostrum* into one of the Enemy's Ships, and there stuck and could not get off: Upon this other Ships came up to his Assistance, and then it was that the Fight began in good Earnest. The *Æginetæ* however say, that it was one of their Ships that made the first Onset. The *Athenians* engaged with the *Phœnicians*, and the *Lacedemonians* with the *Ionians*; among the last of which, some had been underhand tamper'd with by *Themistocles*, and there-

therefore spar'd their Adversaries as much as they possibly could, as being *Greeks* as well as themselves. Some of the *Ionians* nevertheless took some of the *Greek* Ships, of which Number was *Theomestor* the *Samian*, who in Recompence thereof was made by *Xerxes* Tyrant of *Samos*; *Phylacus* also was another, and for that Service was put in the Roll of those that had deserv'd well of the King, and was rewarded by a Grant of some Lands. The King's Fleet however came but badly off; many of his Ships being sunk by the *Æginetæ* and *Athenians*. What chiefly contributed to this, was the Order and Discipline observ'd by the *Greeks* on one hand, and the Disorder and Confusion of the *Barbarians* on the other, who never kept their Line, but ran foul upon one another, and by Consequence must necessarily miscarry, as they did: Not but that they fought valiantly enough, and behav'd themselves much better than they had done before at the Island *Eubœa*: For the King's Presence, who had plac'd himself upon a neighbouring Mountain to see the Battle, animated and inspired them with Courage; but such was the Disorder of their Fleet, that they scarce knew any thing of the Particulars of the Action. During these Transactions, however, an odd Accident happen'd in Favour of Queen *Artemisia*, which got her a much greater Interest with the King: For while the King's Fleet was in the Disorder we have been describing, the Ship in which *Artemisia* was, was attack'd by an *Athenian*, and finding herself too weak to make any great resistance, and having no way to escape, by reason of the Passage being shut up by the King's Ships, resolv'd upon this Expedient, which succeeded as was wish'd: For she immediately tack'd about to fly from the *Athenian* Ship, and ran with all her Force upon a Vessel that belong'd to *Damastibymus* King of the *Chalyndians*, who then assisted *Xerxes*, sunk her at once, and by that Means made a way to escape. Whether this was purposely done out of Revenge, on account of a Quarrel the Queen had had with *Damastibymus* on the *Hellespont*, or that she fell upon his Ship by chance, I know not: But however it was, she reap'd two Advantages from it. The first was, that the *Athenian* Captain seeing the Vessel he was pursuing had sunk one of the Enemy's Ships, took it to be either a *Greek* Ship, or else one that had deserted the Enemy during the Action, ceas'd his Pursuit, and went to attack some other Ship. The second Advantage she gain'd was, that while the King was beholding the Battle from the Mountain, he was advertis'd by some body, probably one of the Queen's Friends, that such a Ship was *Artemisia's*: 'See there, my Prince, says he, how bravely the Queen behaves her self, and how she has sunk an Enemy's Ship;' adding withal, upon the King's asking him if it was really her Ship, that he was very well assur'd of it, and knew her by her Ensigns; all which he said, imagining that it was indeed one of the Enemy's Ships that she had sunk: It also luckily happen'd for the Queen, that not a Man of that Ship was sav'd, to accuse her. The King therefore being thus persuaded, that the Vessel she sunk was an Enemy's Ship, is reported to have express'd himself upon that Occasion in these Words: *The Men that fight for me behave themselves like Women, and the Women like Men.* In this Action there perish'd a great Number of the Nobility of *Persia* and other Nations, and among the rest *Ariabignes* the Son of *Darius*, and Brother to *Xerxes*. The *Greeks* on the other hand lost very few, because knowing all how to swim, they sav'd themselves that way by making to the Island of *Salamis*, as oft as they found their Ships maim'd and like to sink; whereas the *Barbarians*, whenever their Ships sunk, were all lost for want of knowing how to swim. After the first Line of *Xerxes's* Fleet was thus worsted, and the Ships that remain'd thereof were making their Escape, those of the next Line were willing to shew the King what Exploits they could perform, and therefore advanc'd forward in order to fall upon the Enemy: But it happen'd